Report of the
Comptroller and Auditor General of India

for the year ended March 2015

Union Government (Defence Services)
Army, Ordnance Factories and
Defence Public Sector Undertakings
Report No. 19 of 2016

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PREFACE

This Report for the year ended March 2015 has been prepared for submission to the President of India under Article 151 of the Constitution of India.

This Report of the Comptroller and Auditor General of India contains the results of audit of the financial transactions and performance reviews of projects/schemes of Ministry of Defence pertaining to Army, Ordnance Factories, Department of Defence, Department of Defence Production, Defence Research and Development Organisation, Military Engineer Services and Border Roads Organisation in 2014-15. The matters arising from the Finance and Appropriation Accounts of the Defence Services for 2014-15 have been included in Audit Report No. 50 of 2015 (Financial Audit).

The instances mentioned in this Report are those, which came to notice in the course of test audit for the period 2014-15 as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports; matters relating to the period subsequent to 2014-15 have also been included, wherever necessary.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Audit wishes to acknowledge the cooperation received from Ministry of Defence at each stage of the audit process.

OVERVIEW

This Report contains the results of audit of the financial transactions for the year ended March 2015 and performance reviews of projects/schemes of Ministry of Defence pertaining to Army, Ordnance Factories, Department of Defence, Department of Defence Production, Defence Research and Development Organisation, Military Engineer Services and Border Roads Organisation.

The significant audit findings as brought out in the report are summarised as follows:

Functioning of Director General Resettlement

Director General Resettlement (DGR) was formed with the aim of empowering retiring/retired service personnel with additional skills through training and further assisting them in choosing second career through employment/self employment schemes. We however observed that DGR was not able to meet these objectives in re-employing or rehabilitating the ex-servicemen and thereby expectations of nearly 60,000 service personnel retiring each year could not be fully met. After incurring an expenditure of ₹90.98 crore on training during last five years, there was no mechanism in place to ensure that the trained personnel could eventually find re-employment. The existing employment and self employment schemes being run by DGR were more than 10 years old and had therefore lost their effectiveness in the changing work environment. We found no fresh employment or self employment schemes were introduced in the last ten years.

(Paragraph 2.1)

Supply Chain Management of Rations in Indian Army- Follow up Audit

Ministry implemented only two out of 12 recommendations of PAC directly related to activities of Supply Chain Management of ration despite acceptance and assurance given in March 2013. As a result, activities related to provisioning/ procurement, testing, distribution of ration could not be improved and satisfaction level of the troops, particularly in Northern and Eastern Command remained low.

(Paragraph 2.2)

Procurement of Environmental Control Units found incompatible during exploitation

Despite persistent overheating of the engine, the user trial team recommended the procurement of Environmental Control Units (ECU) for fitment in Infantry Combat Vehicles. Accordingly 2,077 ECUs worth ₹219.48 crore were procured in 2009 and 2010. The fitment of ECUs could not however be carried out due to overheating of ICV engines and reduction of its efficiency. The ECUs are therefore lying without any effective use.

(Paragraph 2.3)

Non-deduction of income tax on field allowances granted to Junior Commissioned Officers in the Army

Pay and Accounts Officers (Other Ranks) as Drawing and Disbursing Officers, did not recover income tax on amount of field allowances in excess of exemption limit paid to Junior Commissioned Officers in the Army. The amount of such unrecovered tax worked out to ₹5.05 crore for the period from 2008-09 to 2012-13.

(Paragraph 2.4)

Unwarranted procurement of Radio Sets for trial purposes

Army HQ procured 322 radio sets valuing ₹21.90 crore in excess of the requirement for field trials in 2006. These sets procured for Armoured Fighting Vehicles were not used for the trials and require an up gradation to make them compatible with the Star V Mark II specification, which entails an extra expenditure of ₹11.27 crore.

(Paragraph 3.1)

Irregular attachment of service personnel with private institute

While Army College of Medical Sciences was in the process of establishing its own teaching facilities, Ministry sanctioned the use of part faculty from Government run hospitals, for a period of five years. Army Headquarters however attached service personnel for clerical jobs from various Corps/units, which were not covered under the Ministry's sanction.

(Paragraph 3.2)

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

Based on audit observations, the audited entities had recovered overpaid pay and allowances, sundry charges, training charges cancelled irregular sanctions and amended annual accounts, having a net effect of ₹184.73 crore.

(Paragraph 3.4)

Inordinate Delay in completion of works sanctioned for operational military requirements

Inordinate delay of ten years in construction of an underground operation theatre (UGOT) by Military Engineer Services denied the facility to troops in operations. The work was sanctioned for operational military requirements of a Military Hospital (MH) and was completed at a cost of ₹1.54 crore, after the MH had already moved to a different location. The assets are now lying unutilized.

(Paragraph 4.1)

Improper selection of sites for bridges

Selection of sites without carrying out sub soil investigation (SSI) by Headquarters Director General Border Roads resulted in subsequent foreclosure of work after the soil strata was found unfit for construction of bridges. Non compliance of specific instructions for carrying out SSI resulted in wasteful expenditure of ₹2.53 crore.

(Paragraph 5.1)

Procurement of Cranes without proper need assessment

Against a demand for two lattice cranes, Director General Border Roads procured seven cranes of the capacity more than double of what had been demanded and approved for various Border Road Projects. Due to sheer size and absence of adequate necessity, the cranes procured in 2012 at a cost of ₹6.81 crore remained underutilized to an extent of 86 *per cent.*

(Paragraph 5.2)

Infructuous procurement of material

Defence Research and Development Laboratory procured 1329 Kg of C-103 material valuing ₹4.83 crore, for development of the scramjet project despite being aware that C-103 material would not resist the high temperature generated in the scramjet engine. The procurement was unwarranted and eventually proved wasteful.

(Paragraph 6.2)

ORDNANCE FACTORY ORGANISATION

Extra expenditure due to delay in placement of order

Delay in finalization of the import order due to slippages at various levels of the factory and the Board resulted in extra expenditure of ₹4.58 crore in Gun Carriage Factory for procurement of 25 fully formed guns at a higher rate.

(Paragraph 7.2)

Loss of savings due to failure to procure and install equipments

Failure of OFBL to timely procure and integrate (i) Computed Radiography System and (ii) LINAC machines led to consumption of costly X-ray films and chemical towards X-raying of filled shells, resulting in loss of opportunity to effect savings to the tune of ₹4.62 crore.

(Paragraph 7.3)

Failure to operationalise a machine

Acceptance of a Machine valuing ₹6.32 crore by Vehicle Factory, Jabalpur without proving the Machine for performance and subsequent neglect in preventive maintenance resulted in its breakdown since June 2012.

(Paragraph 7.4)

Blocking up of inventory due to non-replacement of rejected fuses

Failure of Ordnance Factory Chanda to invoke and follow-up on the remedial provisions of the contract on supply of fuses resulted in holding of rejected fuses worth ₹6.05 crore.

(Paragraph 7.6)

DEFENCE PUBLIC SECTOR UNDERTAKINGS

Delay in supply by Defence Public Sector Undertakings (DPSUs)

Inordinate delay in supply of critical weapons and equipment by Defence PSUs during XI Army Plan (2007-12), hampered the modernisation and capability enhancement plan of Indian Army. Audit observed that contracts valuing ₹30098 crore which account for 63 *per cent* of the total value of DPSUs contracts concluded by the Ministry during XI Army Plan, were delayed. Major reasons for delay were undue time taken in development, delay in successful evaluation of pilot sample, heavy dependence of DPSU on foreign vendors, ambiguity in contractual terms, *etc.* Besides impacting the Defence preparedness, the delay had financial implications towards loss of interest on payments made to DPSUs. The objective of self reliance in defence production had also not been achieved.

(Paragraph 8.1)

Avoidable loss due to non-availing of Customs Duty Exemption - Mishra Dhatu Nigam Limited

Failure on part of Mishra Dhatu Nigam Limited to avail exemption and resorting to pay first and claim refund later which was unsuccessful resulted in avoidable extra expenditure of ₹1.30 crore.

(Paragraph 8.2)

CHAPTER I: INTRODUCTION

1.1 Profile of the audited entities

This report relates to matters arising from the audit of financial transactions of the following organisations under the Ministry of Defence:

- Army,
- Inter Services Organisations,
- Defence Research and Development Organisation and its laboratories dedicated primarily to Army and Ordnance Factories,
- Defence Accounts Department
- Ordnance Factories, and
- Defence Public Sector Undertakings

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

Indian Army is mandated to safeguard National Interests from External Aggression and Internal Subversion. Army is primarily responsible for the Defence of the country against external aggression and safeguarding the territorial integrity of the nation. It also renders aid to the civil authorities at the time of natural calamities and internal disturbances. It is, therefore, incumbent upon the Army to suitably equip, modernize and train itself to meet these challenges

The Inter Services Organisations, such as Armed Forces Medical Services, Military Engineer Services (MES), Defence Estates, Quality Assurance, *etc*., serve the Defence forces in the three wings of the Army, Navy and Air Force. They are responsible for development and maintenance of common resources for optimising cost-effective services. They function directly under Ministry of Defence.

Defence Research & Development Organisation (DRDO) works under Department of Defence Research and Development of Ministry of Defence. DRDO dedicatedly working towards enhancing self-reliance in Defence Systems and undertakes design & development leading to production of world class weapon systems and equipment in accordance with the expressed needs and the qualitative requirements laid down by the three services. DRDO, through its chain of laboratories, is engaged in research and development, primarily to promote self-reliance in Indian Defence sector. It undertakes research and development in areas like aeronautics, armaments, combat vehicles, electronics, instrumentation, engineering systems, missiles, materials, naval systems, advanced computing, simulation and life sciences.

Ordnance Factory Board (OFB) functions under the administrative control of the Department of Defence Production and is headed by Director General, Ordnance Factories. Thirty-nine factories are responsible for production and supply of ordnance stores to the armed forces.

Defence Public Sector Undertakings (DPSUs) function under the administrative control of Department of Defence Production. There are nine DPSUs which are headed by respective Chairman cum Managing Director (CMD).

1.2 Authority for audit

The authority for our audit is derived from Articles 149 and 151 of the Constitution of India and the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) (DPC) Act, 1971. We conduct audit of Ministries/Departments of the Government of India under Section 13 of the CAG's (DPC) Act. Major Cantonment Boards are audited under Section 14 of the said Act. Principles and methodology of compliance audit are prescribed in the "Regulations of Audit and Accounts, 2007".

1.3 Audit methodology and procedure

Audit is prioritised through an analysis and evaluation of risks so as to assess their criticality in key operating units. Expenditure incurred, operational significance, past audit results and strength of internal control are amongst the main factors which determine the severity of the risks. An annual audit plan is formulated to conduct audit on the basis of risk assessment.

Audit findings of an audited entity are communicated through Local Test Audit Reports/Statement of Cases. The response from the audited entity is considered which may result in either settlement of the audit observation or referral to the next audit cycle for compliance. Serious irregularities are processed as draft paragraphs for inclusion in the Audit Reports which are submitted to the President of India under Article 151 of the Constitution of India, for laying them before each House of Parliament. Performance Audits are done through structured exercise by defining scope of audit, holding entry conference, sampling of units, exit conference, inclusion of feedback on draft report and issuance of final report.

1.4 Structure of the Report

This report contains eight chapters comprising three performance reviews and 20 audit paragraphs based on the audit of financial transactions of Ministry of Defence pertaining to Army, Inter Services Organisations, Defence Research and Development Organisation, Defence Accounts Department, Ordnance Factories and DPSUs.

1.5 Financial aspects and Budgetary Management

1.5.1 Introduction

The budgetary allocations of the Ministry of Defence are contained under eight Demands for Grants of which six grants are included under Defence Service Estimates (DSE) and two under Civil Grants.

- Two Civil Grants which include Demand No. 20 - Ministry of Defence (Civil) and Demand No. 21 - Defence Pensions.

- Six Grants of the Ministry of Defence, which include the following:

  Demand No.22, Defence Services - Army

  Demand No. 23, Defence Services - Navy

  Demand No. 24, Defence Services - Air Force

  Demand No. 25, Defence Ordnance Factories

  Demand No. 26, Defence Services - Research & Development

  Demand No. 27, Capital Outlay on Defence Services -Includes All Services and Departments other than those covered by the Demands for Grants of Ministry of Defence (Civil)

- The budgetary requirements for the Border Roads Organisation are provided by the Ministry of Road Transport & Highways.

The above mentioned Grants are broadly categorized into Revenue and Capital expenditure.

- **Revenue Expenditure:** This includes expenditure on Pay & Allowances, Transportation, Revenue Stores (like Ordnance stores, supplies by Ordnance Factories, Rations, Petrol, Oil and Lubricants, Spares, *etc.*), Revenue Works (which include maintenance of Buildings, water and electricity charges, rents, rates and taxes, *etc.*) and other miscellaneous expenditure.

- **Capital Expenditure:** This includes expenditure on Land, Acquisition of new weapon and ammunitions, Modernization of Services, Construction Works, Plant and Machinery, Equipment, Tanks, Naval Vessels, Aircraft and Aero-engines, Dockyards, *etc*.

Approval of Parliament[1] is taken for the Gross expenditure provision under different Demands for Grants. Receipts and Recoveries, which include items like sale proceeds of surplus/obsolete stores, receipts on account of services rendered to State Governments/other Ministries, *etc*. and other miscellaneous items are deducted from the gross expenditure to arrive at the net expenditure on Defence Services for the six Demands, *viz*. Demands Nos. 22 to 27. A brief analysis of these grants is given below except Grant No. 23, Defence Services-Navy and Grant No.24, Defence Services-Air Force which are commented upon in a separate report.

1.5.2 Grant No.20 & 21- Expenditure from Civil Grants

1.5.2.1 Grant No. 20- Expenditure of Ministry of Defence (Civil)

Against the revised estimates of ₹19,467 crore actual expenditure for the year 2014-15 under Demand No. 20 was ₹19,363 crore. This included expenditure of ₹18,175 crore under Revenue heads and ₹1,188 crore under Capital head. Major components of these expenditures are shown in the **Table-1**:

Table -1: Table showing major components of Revenue and Capital expenditure

Revenue Expenditure		Capital Expenditure	
Name of Department	**₹ in crore**	**Name of Department**	**₹ in crore**
Canteen Stores Departments (CSD)	14199	Customs-CGO	1142
Defence Accounts Department (DAD)	1136	DEO-Other Building	24
Coast Guard Organisation (CGO)	1287	DAD-Other Building	17
Jammu & Kashmir Light Infantry (JAK LI)	969	Misc. loans for Unit Run Canteen (URC) by CSD	2
Defence Estate Organisation (DEO)	390	Other Departments	3
Other Departments	194		

1.5.2.2 Grant No. 21 - Defence Pensions

Defence Pensions, under Ministry of Defence, provides for pensionary charges in respect of retired Defence personnel (including Defence Civilian employees) of the three services, *viz.* Army, Navy and Air Force, and of employees of Ordnance Factories, *etc*. It covers payments of service pension, gratuity, family pension, disability pension, commuted value of pension, leave encashment, *etc*.

[1] Report No.20 of Standing Committee on Defence (2012-13, Fifteenth Lok Sabha)

The position of budgetary allocation and expenditure for the year 2014-15 under this Grant is as under:

Table- 2: Budgetary allocation and Actual Expenditure

(₹ in crore)

Budget Estimates	Revised Estimates	Actual Expenditure
51,000	50,000	60,450

The excess expenditure of ₹10,450 crore over the revised estimates underlines the need for improvement in the budget estimation.

1.6 Grant No. 22 to 27 – Defence Services Estimates

1.6.1 At a glance

The overall Defence Budget (Grant No. 22 to 27) allocation and actual expenditure (Voted & Charged) for the period 2010-11 to 2014-15 are given in **Table-3.**

Table-3: Total Defence Budget allocation and Actual expenditure

(₹in crore)

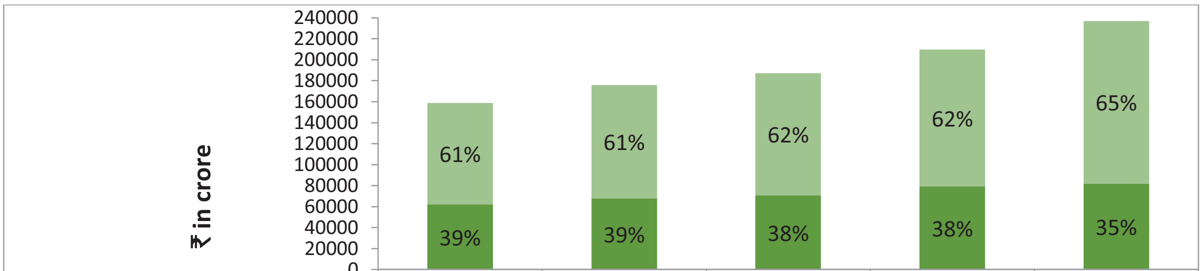
Year	Budget Provision	Actual Expenditure
2010-11	1,56,127	1,58,723
2011-12	1,78,891	1,75,898
2012-13	1,98,526	1,87,469
2013-14	2,17,649	2,09,789
2014-15	2,54,000	2,37,394

The data relating to actual Defence expenditure in 2014-15 shows an increase of 13.16 *per cent* over the previous year and overall increase of 49.56 *per cent* since 2010-11.

1.6.2 Revenue expenditure vs. Capital expenditure in Defence Services

Capital and Revenue expenditure (voted) for the period 2010-11 to 2014-15 is given in **Chart - 1** below:

Chart - 1: Revenue expenditure vs. Capital expenditure (Voted)



	2010-11	2011-12	2012-13	2013-14	2014-15
Revenue Expenditure (Voted)	96625	107961	116708	130482	155168
Capital Expenditure (Voted)	62012	67844	70483	79093	81742

The above data shows that the proportion of Voted Capital and Revenue expenditure as a percentage of total Defence expenditure (voted) has remained between 35 and 39 *per cent* during the period 2010-11 to 2014-15, however, there is an increase of three *per cent* in revenue expenditure over the previous year in 2014-15 and a corresponding decrease in the Capital expenditure.

1.7 Break-up of Expenditure (voted) relating to Army, Ordnance Factories & R&D (Capital & Revenue) – Grant No. 22, 25, 26 and 27[2]

A detailed analysis of the expenditure (voted) for the period 2010-11 to 2014-15 relating to Army, Ordnance Factories and R & D showing Revenue and Capital expenditure is given in **Table-4** below.

Table-4: Expenditure (voted) of Army, Ordnance Factories & R&D

(₹ in crore)

Description of Grant	Components of Expenditure	Year				
		2010-11	2011-12	2012-13	2013-14	2014-15
Army	Actual	80,790	86,776	94,274	1,02,139	1,17,700
	Revenue	65,002 (80.46)	71,833 (82.78)	79,517 (84.35)	87,720 (85.88)	99,139 (84.23)
	Capital	15,788 (19.54)	14,943 (17.22)	14,757 (15.65)	14,419 (14.12)	18,561 (15.77)
Ordnance Factory	Actual	1,527	1,704	2,116	3,964	13,576
	Revenue	1,073 (70.30)	1,428 (83.79)	1,754 (82.88)	3,499 (88.26)	12,830 (94.50)
	Capital	454 (29.70)	276 (16.21)	349 (16.60)	465 (11.74)	746 (5.50)
R&D	Actual	1,0192	9,932	9,860	10,929	13,635
	Revenue	5,231 (51.32)	5,321 (53.58)	5,218 (52.92)	5,696 (52.12)	6,236 (45.74)
	Capital	4,961 (48.68)	4,611 (46.43)	4,642 (47.08)	5,233 (47.88)	7,399 (54.26)

Note: Figure in the brackets represents the Revenue/Capital expenditure as a percentage of the total Actual expenditure

- The total Army expenditure during 2014-15 has registered an increase of 15.24 *per cent* over the previous year with the Revenue expenditure

[2] Grant No. 23 – Navy and Grant No. 24 – Air Force are analysed in the respective Audit Reports of the Union Government (Defence Services) Air Force and Navy

registering an increase of 13.02 *per cent* and the Capital expenditure recording an increase of 28.73 *per cent.* Since 2010-11, the components of expenditure have increased by 45.68 *per cent*, 52.51 *per cent* and 17.56 *per cent* respectively.

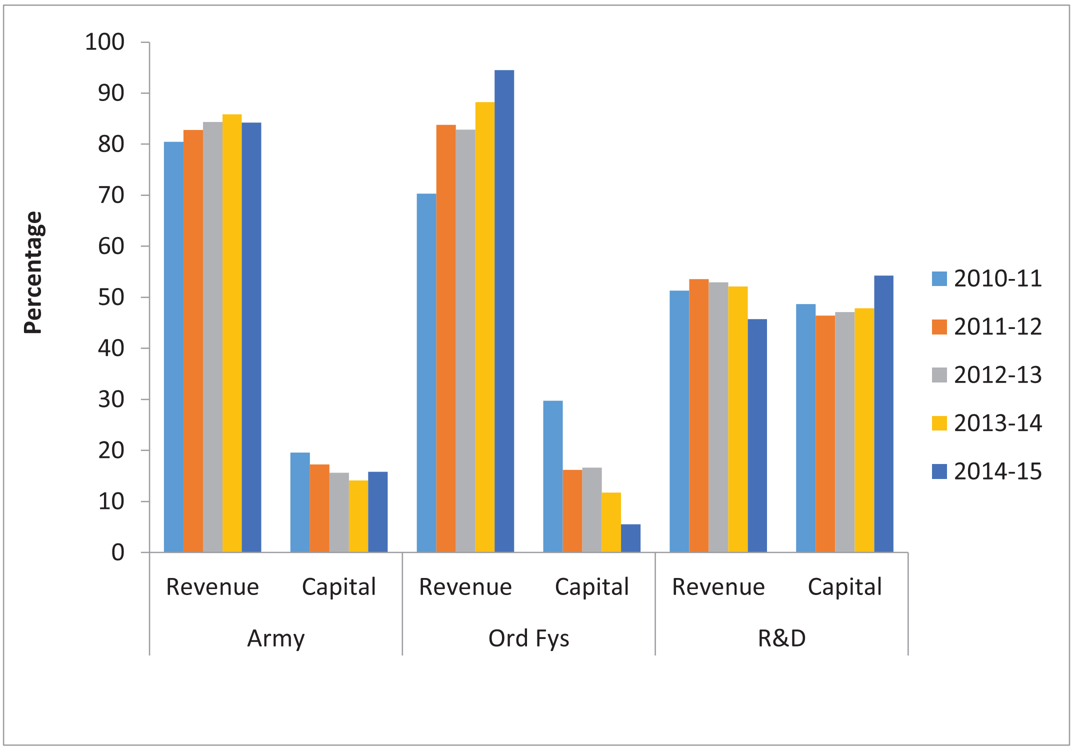
- The increase in the expenditure of Ordnance Factory (OF) Board during 2014-15, as depicted in the Table 4 above, was mainly due to change in the accounting system where the approval of Parliament was sought on "gross" amounts of expenditure. During the previous years the approval was however being sought on 'Net Basis of accounting'

- The total R&D expenditure during 2014-15, has recorded an increase of 24.76 *per cent* over the previous year with Revenue expenditure an increase of 9.48 *per cent* and the Capital expenditure registering an increase of 41.38 *per cent*. Since 2010-11, the components of expenditure have increased by 33.78 *per cent*, 19.22 *per cent* and 49.14 *per cent* respectively.

1.7.1 Trend of total Expenditure in respect of Army, Ordnance Factories and Research & Development - Capital and Revenue

A trend of total Army, Ordnance Factories and Research and Development expenditure both Capital and Revenue as a proportion of actual expenditure during the period 2010-11 to 2014-15 is given in **Chart-2** below:

Chart-2: Trend Revenue and Capital Expenditure as a percentage of the total expenditure



- **Army*:*** In 2014-15 Revenue component of total Army expenditure has increased by 4 *per cent* since 2010-11 from 80 *per cent* in 2010-11 to 84 *per cent* in 2014-15 while the Capital component has recorded a corresponding decrease during the same period from 20 *per cent* (2010-11) to 16 *per cent* (2014-15).

- **Ordnance Factories:** The Revenue and Capital component of the expenditure by the Ordnance Factories for the period 2010-11 to 2014-15 shows a consistent increase. The figures for the year 2014-15 depicted in the Table 4 above also factors in the change in the accounting system, from 'Net Basis of accounting' to 'Gross Basis of accounting'.

- **Research & Development:** The Revenue expenditure on Research & Development has decreased by five *per cent* from 51 *per cent* in 2010-11 to 46 *per cent* in 2014-15 during the period 2010-11 to 2014-15 while the Capital expenditure has increased by a similar percentage from 49 *per cent* to 54 *per cent.*

1.8 Trend of major components of Revenue expenditure (Voted)

1.8.1 Army (Voted)

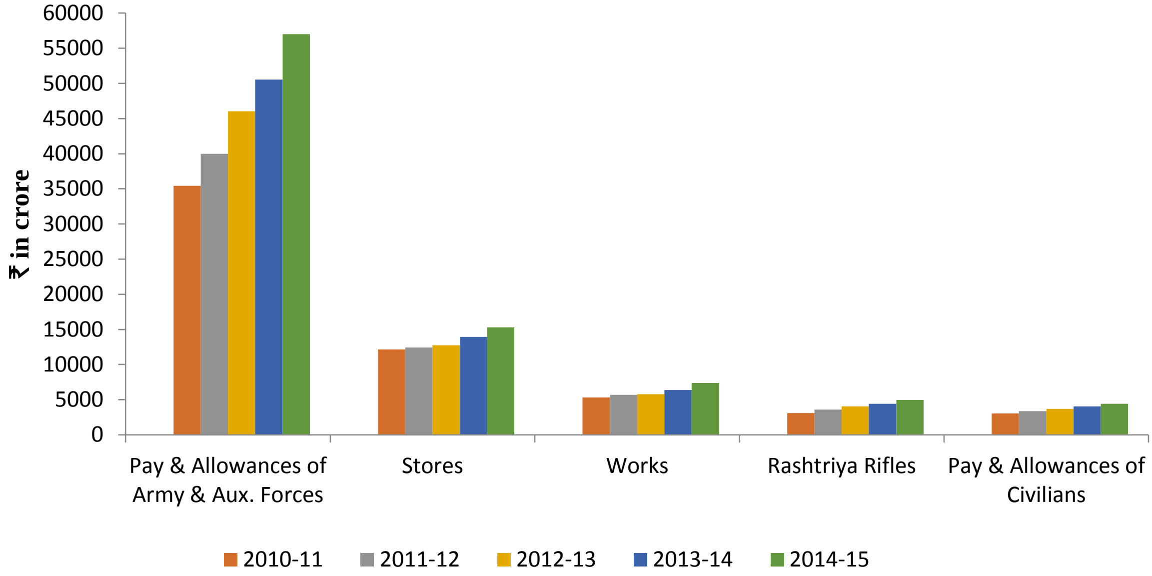
During the period 2010-11 to 2014-15 maximum Revenue expenditure was incurred under five Minor Heads (MH) of the Army as given in **Table-5** and in the **Chart-3** below:

Table-5: Details of major components of Revenue expenditure of Army

(₹ in crore)

Components of Expenditure	Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Pay & Allowances (MH-101& 103)	35,445	39,996	46,057	50,533	56,997
Stores (MH-110)	12,144	12,442	12,750	13,954	15,324
Works (MH-111)	5,308	5,709	5,769	6,384	7,399
Rashtriya Rifles (MH-112)	3,099	3,585	4,076	4,436	4,967
Pay & allow. of Civilians (MH-104)	3,051	3,361	3,674	4,056	4,422

Chart-3: Major components of Revenue expenditure of Army



- Against a 13 *per cent* annual increase in the revenue expenditure of Army in 2014-15, overall increase in five Minor Heads having highest expenditure *viz*. Pay & Allowances of Army & Auxiliary Forces, Stores, Works, Rashtriya Rifles and Pay and Allowances of Civilian ranged between 9 and 16 *per cent.*

1.8.2 Ordnance Factories (voted)

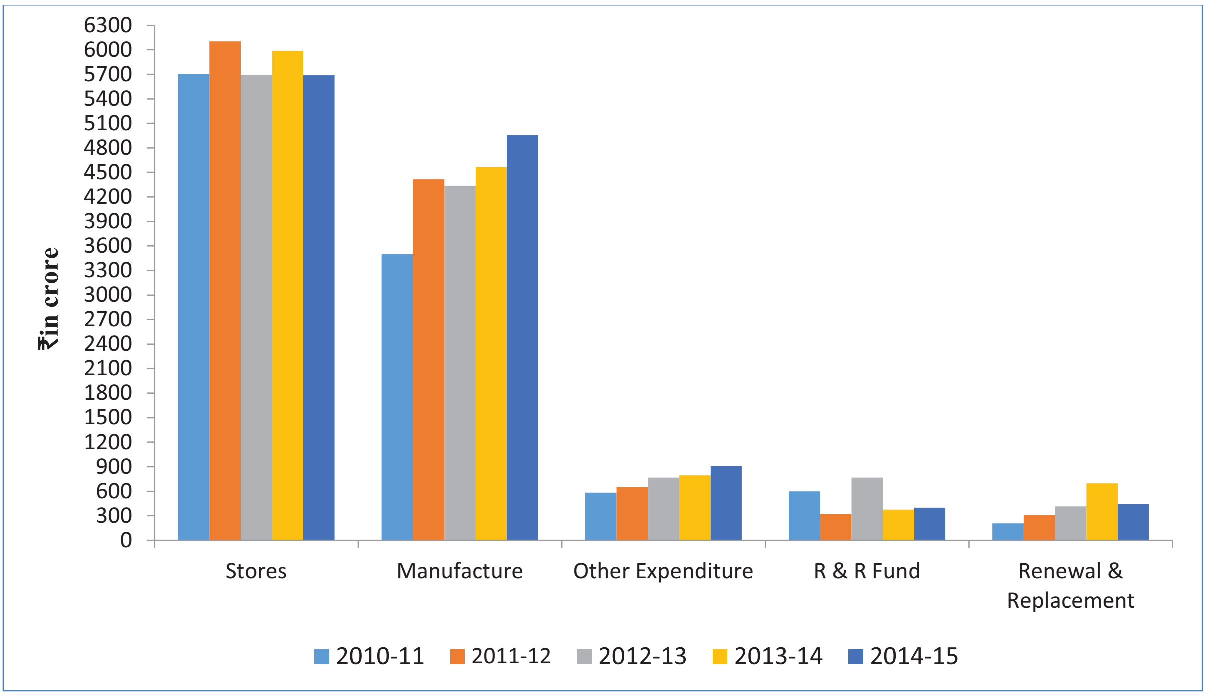
During the period 2010-11 to 2014-15 maximum Revenue expenditure was incurred under five MH of the Ordnance Factories as shown in **Table-6** and in the **Chart-4** below:

Table-6: Major components of Revenue expenditure of Ordnance Factories

(₹in crore)

Components of Expenditure	Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Stores MH-110	5,705	6,101	5,692	5,990	5,686
Manufacture-MH-054	3,500	4,415	4,336	4,563	4,961
Renewal& Reserve (R&R) Fund MH-797	600	325	350	375	400
Renewal & Replacement MH-106	208	310	416	697	442
Other expenditure MH-800	583	650	768	795	911

Chart 4: Major components of Revenue expenditure of Ordnance Factories



1.8.3 Research & Development (voted)

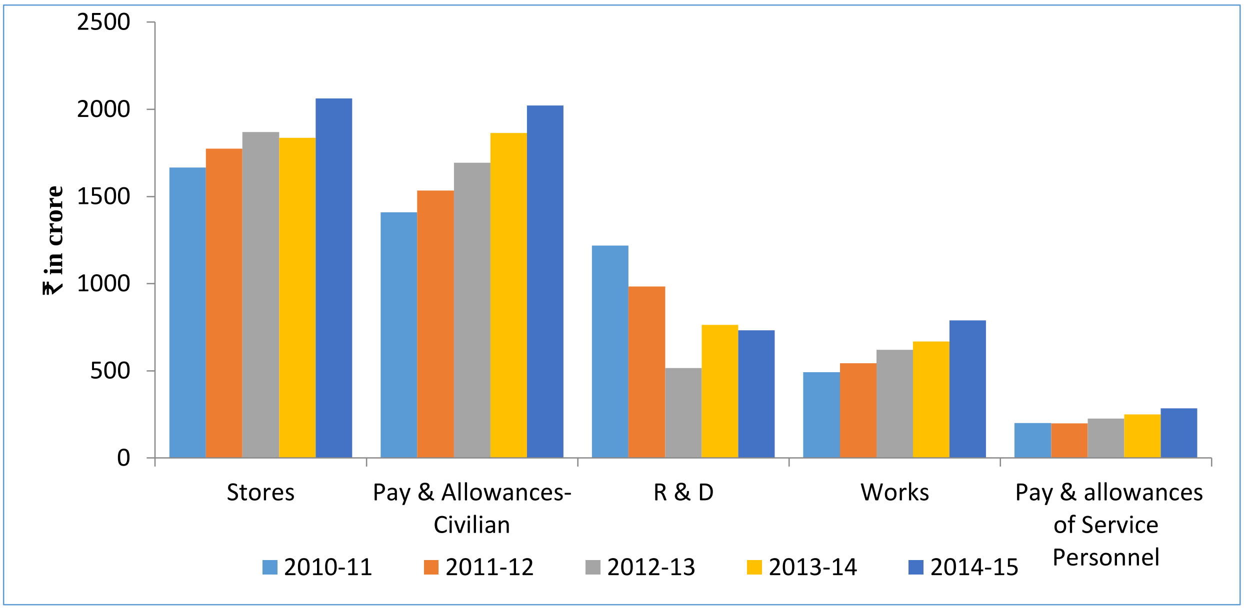
During the period 2010-11 to 2014-15 maximum Revenue expenditure was incurred under five Minor Heads (MH) of the R&D as given in **Table-7** and **Chart-5** below:

Table-7: Major components of Revenue expenditure of Research &Development

(₹in crore)

Components of Expenditure	Year				
	2010-11	2011-12	2012-13	2013-14	2014-15
Stores MH-110	1,666	1,774	1,870	1,837	2,063
Pay & Allowances-Civilian MH-102	1,410	1,535	1,694	1,865	2,021
R&D MH-004	1,218	984	517	765	733
Works MH-111	492	543	621	669	790
Pay & Allowances of Service Personnel MH-101	202	198	226	251	285

Chart 5: Major components of Revenue expenditure of Research &Development



- Against an overall annual increase of 9.5 *percent* in the revenue expenditure of R&D in 2014-15, the increase in four Minor Heads having highest expenditure *viz*. Stores, Pay & Allowances of Civilians, Works and Pay & Allowances of Service ranged between 8 and 18 *per cent*. However, in case of Minor Head R&D, there was a decrease of 4 *per cent* over the previous year.

1.9 Trend of Capital expenditure - Major Head-4076-Grant No. 27- Capital Outlay on Defence Services

1.9.1 Components of Capital expenditure

There are eight Sub Major Heads (SMH) under this Grant, *viz*. Sub Major Head 01- Army, Sub Major Head 02 - Navy, Sub Major Head 03- Air Force, Sub Major Head 04 - Ordnance Factories, Sub Major Head 05 - R&D, Sub Major Head 06 - Inspection Organisation, Sub Major Head 07 - Special Metal and Super Alloys Projects and Sub Major Head 08- Technology Development.

1.9.2 Trend analysis of Capital expenditure[3] (voted) of Army, Ordnance Factories and R&D

The details of Capital expenditure of Army, Ordnance Factories and R&D during the period 2010-11 to 2014-15are given in **Table-8** below:

[3] SMH- 02 and SMH- 03 are analysed separately in the respective Audit Reports of Union Government (Defence Services) of Navy and Air Force. In respect of SMH- 06 and SMH- 08 total expenditure for the period 2010-11 to 2014-15 was ₹44 crore and ₹140 crore respectively. In respect of SMH-07 the expenditure during these years was Nil.

Table-8: Total Capital Expenditure (Defence Services) Vs Army, Ordnance Factories and R&D

(₹in crore)

Capital Expenditure	Year				
	2010-11	2011-12	2012-13	2013-14	2014-15
Defence Services	62,012	67,844	70,483	79,093	81,742
Army	15,788	14,943	14,757	14,419	18,561
Ordnance Factories	454	276	349	465	746
Research & Development	4,961	4,611	4,642	5,233	7,399

- **Capital Expenditure of Defence Services**: Capital expenditure of Defence Services has recorded an increase of 3.35 *per cent* in 2014-15 over the previous year. In case of Army, OF and R&D the annual increase was however 29, 60 and 41 *per cent* respectively. For the five year period from 2010-11 to 2014-15 against the overall increase 32 *per cent* in the capital expenditure of Defence Services, the increase expenditure under Army, OF and R&D was 18, 65 and 49 *per cent* respectively.

1.10 Response of the Ministry/Department to Draft Audit Paragraphs

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

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

Draft paragraphs proposed for inclusion in this Report were forwarded to the Secretaries concerned between December 2015 and February 2016 through letters addressed to them personally.

The Ministry of Defence did not send replies (March 2016) to 17 paragraphs out of 23 Paragraphs featured in Chapters II to VIII.

1.11 Action taken on earlier Audit Paragraphs

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

Review of ATNs relating to the Army as of March 2016 indicated that ATNs on 50 paragraphs included in the Audit Reports up to and for the year ended March 2013 and Report No.19 of 2015 remained outstanding, of which the Ministry had not submitted even the initial ATNs in respect of 9 Paragraphs and 11 ATNs (Sl. No.1 to 11) are outstanding for more than 10 years as shown in **Annexure-I**.

CHAPTER II : MINISTRY OF DEFENCE

2.1 Functioning of Director General Resettlement (DGR)

Director General Resettlement (DGR) was formed with the aim of empowering retiring/retired service personnel with additional skills through training and further assisting them in choosing second career through employment/self employment schemes. We however observed that DGR was not able to meet these objectives in re-employing or rehabilitating the ex-servicemen and thereby expectations of nearly 60,000 service personnel retiring each year could not be fully met. After incurring an expenditure of ₹90.98 crore on training during last five years, there was no mechanism in place to ensure that the trained personnel could eventually find re-employment. The existing employment and self employment schemes being run by DGR were more than 10 years old and had therefore lost their effectiveness in the changing work environment. We found no fresh employment or self employment schemes were introduced in the last ten years.

2.1.1 About DGR

The Department of Ex-Servicemen Welfare (ESW/Ministry), headed by Secretary, was created in September 2004, under Ministry of Defence (MoD) and three organizations i.e. Directorate General Resettlement (DGR), Ex-Servicemen Contributory Health Scheme (ECHS) and Kendriya Sainik Board[4] (KSB) were placed under this department. In January 2009, KSB, which was earlier under the administrative control of DGR, became a separate entity.

Nearly 60,000 armed forces personnel retire or are released from active service every year, most of them being in the comparatively younger age bracket of 35 to 45 years and 50 to 55 years on the higher side and they require a second career. These personnel constitute a very valuable disciplined, well-trained and dedicated talented pool which should be utilized for nation building.

The role of DGR is to empower retiring/retired service personnel with additional skills through training courses and assist them in choosing second career through employment/self employment schemes, to liaise with Corporate/Private Sector for seeking greater employment opportunities for Ex-Servicemen (ESM) and act as the interface between retired service personnel, dependents and the outside environment for resettlement/second career.

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[4] KSB is an apex body of the Govt of India, under Hon'ble Raksha Mantri, which formulates policies for resettlement and welfare of ESM and their families. The Rajya & Zila Sainik Boards, are the field units of KSB.

2.1.2 Organization setup

The DGR headed by the Director General (Resettlement), who is of the rank of Lt. General or equivalent. There are five Directors Resettlement Zone (DRZ) under DGR each stationed at Lucknow (Central Command), Pune (Southern Command), Chandimandir (Western Command), Kolkata (Eastern Command) and Udhampur (Northern Command). Organization of DGR at New Delhi has eight directorates (Dte) *viz.* Training Directorate, Employment Dte, Self Employment Dte, Entrepreneur & Loans Dte, Statistics & Records Dte, Publicity, Information Technology and Administration & Coordination each headed by a Director and having designated roles and responsibilities. The role of each Dte is explained in **Annexure-II**.

2.1.3 Scope of audit and audit methodology

Performance review of DGR for the period 2010-11 to 2014-15 was carried out between May 2015 and September 2015, including two Director Resettlement Zones (DRZ) located at Lucknow and Pune. We examined proposals of training institutes/courses covering 30 *per cent* of the expenditure on training. We also examined eight[5] Schemes (73 *per cent*) out of eleven[6] for employment/self employment of the ESM. The review was commenced with an Entry Conference held on 25 May 2015 with Secretary, ESW, MoD explaining, *inter alia*, the objectives, scope and methodology of the audit. During the course of audit, we issued preliminary audit memos, seeking response of the audited entity. The audit was culminated with an Exit Conference, held on 12th January 2016 with the Secretary ESW.

2.1.4 Audit objectives

The Performance review was conducted with a view to assess whether:

- effective procedure for registration of retiring/retired personnel existed and the names were sponsored efficiently for trainings/schemes;
- the selection of courses for training were realistically done and screening /shortlisting / selection of institutes for training was done in a clear, fair and effective manner;
- adequate inspection of training institutes was carried out before their selection and during currency of the course;

[5] Allotment of Army Surplus Class V 'B' Vehicles to ESM/Widows/ Cooperative Societies of ESM, Coal Loading and Transportation Scheme, Security Agency Scheme, Oil Products Agencies/LPG Distributorship Scheme, Compressed Natural Gas Outlet Manager Scheme, Company Owned Company Operated (COCO) Retail Outlet Scheme, Mother Dairy scheme and Gopalji Dairy & Fresh Farm Scheme

[6] Entrepreneurship Scheme for ESM, Insurance an Assurance : Guaranteeing most favoured Status and Desh Rakshak Dealership Resettlement Scheme

- the DGR was able to achieve their aim and objectives as per mandate;
- DGR liaised with Corporate / Private Sector to see greater employment opportunities for ESM;
- various schemes for Retired Officers/PBORs were monitored efficiently;
- the funds available for welfare of ESM were managed economically and efficiently;

2.1.5 Acknowledgement

We acknowledge the cooperation of officers and staff of the Department of ESW, MoD, DGR and DRZs at Lucknow and Pune.

Audit Findings

2.1.6. Training

DGR organizes training for retiring armed forces personnel (Officers during last one year of service and Personnel Below Officers Rank during the last two years of service), Ex-Servicemen (ESM) (Retired/released Officers within three years and retired/released Personnel Below Officers Rank within five years of release/retirement or up to the age of 60 years whichever is earlier) and widows/wards of deceased personnel through various Government/Semi Government Institutes and other reputed Institutes to enhance their qualifications and enable them to seek suitable second career/employment after retirement. The training is also organized by DGR through institutes at Regimental Centres (RC) for Personnel Below Officers Ranks (PBORs) on Pension Drill (*i.e.* PBOR report to RC one month preceding retirement to complete their pension papers).

2.1.6.1 Registration / Sponsoring of names for training

The procedure for registration and sponsoring of names for training was enumerated by the Ministry in its guidelines issued in September 2009. As per this procedure the names of willing Serving Officers/Personnel Below Officer Rank (PBORs), as per their eligibility, are forwarded for training to the DGR by the respective Service HQ, whereas, the retired Officers/PBORs submit their applications directly to DGR through Zila Sainik Board (ZSB). On receipt of the sponsored names of Serving Officers/PBORs from Service HQ, the final selection is to be done by the Committee consisting representative of MoD, DGR and the three Services.

We observed that:

- Contrary to the guidelines issued by the Ministry, no committee was constituted for final selection of trainees during last five years *i.e*. 2010-11 to 2014-15. In absence of the committee, screening of candidates was not being done and all the names sponsored by Service HQ were considered for training.

- The guidelines did not lay down the qualifying requirements to be looked into by the Service HQs for accepting the requests received from Officers/PBORs. Service HQs therefore selected trainees without any criteria and allocated courses to them arbitrarily.

- In respect of ESM, no record for number of applications received, numbers of ESM deployed for training and actually undertaking training was maintained by DGR. In the absence of any documentation there was no trail to assess the implementation of the scheme.

The Ministry, in its reply (February 2016), admitted the points for compliance and stated that owing to large number of applications for training i.e. approximately 24,000 per annum, the activity of short listing of candidates was delegated to Service HQs. The practice of delegating such activity was not only in contravention to laid down procedure but also carried the risk of subjectivity, as no qualifying criteria was laid down in the guidelines for the Service HQs to shortlist the candidates. The Ministry, however, accepted the need for forming a committee with participation of Service HQs on quarterly basis. In regards to non-maintenance of record of ESM, it was stated that necessary instructions were being issued for forwarding all documents by RSBs/ZSBs.

2.1.6.2 Selection of Courses/Institutes for Training

As per ESW's guidelines of September 2009, the DGR will each year, invite Expression of Interest (EOI) from the interested institutes based on eligibility criteria such as affiliation/accreditation, infrastructure, computer lab, faculty, registration, PAN/TAN/audited accounts, website, *etc.* through newspapers/website. On submission of such application the concerned institutes would make a presentation before a Committee consisting of MoD representative, DGR and the representatives of three Services. Thereafter, a Board of Officers (BoO) selects the institutes based on various parameters such as proximity to defence establishment, domain specialization, geographical spread of the institute, *etc*. along with courses and course fee for which approval of the Ministry is obtained. On approval, DGR publishes Resettlement Training Programme Booklet (RTP Booklet) annually, bringing out details of courses, duration, *etc.* and circulate the same to the Services. Further, an agreement is entered into by the DGR with the selected institute specifying *inter alia* the name of the course, duration of the course, number of participants, course fees, *etc*.

We noticed that against the EoIs invited by DGR for the years 2010-11 to 2014-15, total 1328 proposals including willingness from IIMs were received from training institutes.

Out of the 1328 proposals received, we examined 175 proposals (120 proposals containing 334 courses of selected institutes and 55 proposals of rejected institutes) and found that:

- Out of 120 selected institutes, 28 institutes did not have affiliation and four of these institutes namely National Security Training Institute, New Delhi, Indian Institute of Logistics, Chennai, Jay Cee Aviation Services (P) Ltd, New Delhi & APTECH Computer Education, Secunderabad were not even registered as per the documents made available to audit. As such these institutes did not fulfil the eligibility criteria laid down in the EOI. The certificates issued by these unregistered institutes would therefore not provide any gainful employment to the Service Personnel as the courses/institutes were not registered / affiliated to recognized bodies.

- Out of 55 rejected institutes we found that 12 institutes (22 *per cent*) were rejected despite fulfilling the eligibility criteria as laid down in the EoI. No reason for rejection of the Institutes had been given by the Board of Officers, except for the year 2010-11.

- Despite a system in place to gauge the performance of the institutes by inviting them for presentation before the Board prior to their selection, no such presentation was called for by DGR or offered by the selected 120 institutes.

- Out of 334 courses pertaining to 120 sampled Institutes, in 39 courses the turn-out of trainees was 10 *per cent* and below of the total vacancies, which shows that these courses were improperly selected.

- No guidelines exist for determination of course fees by the Board of Officers. The course fee was decided based on previous years' rates and without any basis or norms.

- In 56 out of 334 courses conducted during the last five years, an amount of ₹3.2 crore was paid to the Institutes without entering into any agreement.

The Ministry, in reply (February 2016) stated that the institutes whose proposals were received timely in response to the EOI are only being considered in the BoO. In regards to acceptance of proposals from ineligible institutes, it was stated that the corrective measures were already taken from the training year 2014-15 onwards, wherein such instances were brought down to nil. Further, ESW proposed that the need for making presentations be sought only from new shortlisted institutes before its final empanelment. In regards to determination of course fees, ESW stated that fee structure given by National Skill Development Council (NSDC) will be made applicable with an increment of 10 *per cent* every 3 years. The decision of cancellation of courses would be taken only after obtaining due approval of ESW. Further, it was stated that to avoid poor attendance of trainees, the issue would be discussed with three Services during the joint meeting like Principal Personnel Officers' Committee (PPOC). It was also stated that the some of the agreements were in the possession of Service tax department for verification, which is in the process of recovering.

The reply was not acceptable as, the need for making a presentation by the institutes to a Board before its selection was specifically laid down in the guidelines issued by the Ministry. The BoO also failed to objectively ensure the fulfilment of eligibility criteria of the institutes. No reason for rejection of 12 institutes, which fulfil the eligibility criteria had been furnished. As such selection of training institutes was not done in a clear, fair and effective manner and selection of courses was not totally need based defeating the very purpose of imparting training for resettlement, which resulted in poor attendance and even cancellation of courses.

2.1.6.3 Delay in implementation of Review Committee's recommendations

Service Units/Formations co-located with the institutes, DRZs and Service HQs had intermittently given feedback that there was a gap between the selected training courses and the skills required by the industry resulting in very few candidates getting benefitted in gainful employment. Doubt on the quality and credibility of the training institutes was also raised. Based on this feedback, a need for review of training courses and criteria for selection of training institutes in consultation with Service HQs and representatives of Industry, in order to improve quality of resettlement training leading to better/assured placement to retiring personnel was felt. A review committee, headed by DGR, was accordingly convened under the orders of RRM in August 2012.The Committee submitted its report to ESW in December 2012, which recommended various measures for selection of institutes and courses mainly as under:

(a) Security courses should be suspended till adequate number of training Institutes certified by Security Knowledge and Skill Development Council (SKSDC) are available for conduct of such training. These security courses at Regimental Centres may be replaced by Soft Skill Development Courses, certified computer courses and any other suitable courses as an interim measure. Courses at regimental centre be de-linked from discharge drill.

(b) Need to have service specific courses.

(c) The 67 courses approved by ESW in May 2006 be cancelled.

We observed that:

- ❖ The report was pending with the Service HQ even after lapse of three years, which led to non-implementation of the committee's recommendations for conducting placement oriented courses and non-delinking of the courses at Regimental Centres from discharge drill.

- ❖ The training programme continued to be run without job orientation. Against the spirit of the committee's recommendations about cancellation of 67 unwarranted courses, the DGR conducted 11 such courses during the years 2013-14 and 2014-15 by incurring an expenditure of ₹ 5.41 crore, which was not justified.

The Ministry, in its reply (February 2016) stated that the most of the recommendations as given by the Committee were being considered by the BoO, however, certain issues have been referred to the three Service HQs for deliberations. The Ministry**,** however, did not provide any detail in this regards. In regard to unfruitful expenditure on unwarranted courses valuing ₹5.41 crore, it was stated by DGR that the courses which were recommended for deletion, were courses meant for ESM only, which were run at ZSBs and not for retiring/retired service personnel and the same should not be clubbed.

The fact remains that despite adverse feedback from the Services about the gaps in the training, the report of the Review Committee submitted in December 2012 was yet (February 2016) to be approved by the Ministry. Further 11 courses, which were conducted despite the recommendations of the committee, did not provide much opportunities for re-employment and thus the expenditure of ₹5.41 crore on these courses was unwarranted.

2.1.7 Monitoring of Training

The mandate of Director Resettlement Zones (DRZs) is to inspect the training institutes before their selection and during currency of the course so as to keep a check regarding adequacy of infrastructure and training faculty, quality of training, attendance of participants, *etc*.

2.1.7.1. Irregularities in furnishing of Nominal Rolls and attendance of participants

As per the agreements entered between the DGR and training institutions, the Institutes are required to forward the details of participants/trainees attending course within first week of commencement of course to DGR. Further, an attendance register was required to be maintained and a photocopy of the same forwarded to the Training Dte at the end of the course along with the bill.

We observed that

- In disregard to the above condition, no institute was forwarding the details of trainees attending the course to the DGR in time. The latter came to know about the actual number of trainees only after completion of training and on receipt of bills. Thus, the lack of basic input about the actual number of trainees reporting in institutes is suggestive of absence of monitoring.

- As per the agreement, an attendance register was to be maintained for the trainees, which should be attached with the bill of the Institute. We found that there was no uniformity for marking attendance of trainees. Out of 334 payment cases in respect of 120 selected institutes, attendance was marked with signature of trainees in 165 cases, as 'P' in 141 cases and in 28 cases no attendance sheet was attached. In the absence of proper attendance sheet and without having signature of the trainees, the actual attendance of the participants during the entire period of course could not be established.

- During audit at DRZ Lucknow, random inspection of an Institute conducting two courses was carried out by Audit in the presence of Officers of DRZ. It was found that in one course, 05 trainees were present out of 30 detailed (07 reported) and in the other course 05 trainees were present out of 30 (14 reported). The absentee position not only defeats the very purpose of imparting training to ESM but may also lead to irregular claims by the institutes for period of absence of trainees.

The Ministry while admitting the facts (February 2016) have assured compliance of audit points, which would be awaited.

2.1.7.2 Lack of Inspection of Institutes/Courses by Director Resettlement Zones

The mandate of Director Resettlement Zones (DRZs) is to inspect the training institutes before their selection and during currency of the course so as to keep a check regarding adequacy of infrastructure and training faculty, quality of training, attendance of participants, *etc*.

DRZ Lucknow covers 7 States and DRZ Pune covers 9 States and 2 Union Territory. The details of courses planned and inspection carried out by DRZ Lucknow and Pune as shown in **Table-9** below:

Table-9: Courses planned and inspection carried out by DRZ Lucknow and Pune

FY	DRZ Lucknow			DRZ Pune		
	Courses planned at Institutes	Inspection of courses conducted	% of inspection of courses conducted	Courses planned at Institutes	Inspection of courses conducted	% of inspection of courses conducted
2010-11	Not Avbl	-	-	12	7	58%
2011-12	Not Avbl	-	-	69	10	15%
2012-13	65	12	18%	91	11	12%
2013-14	71	27	38%	132	14	11%
2014-15	69	10	15%	130	22	16%
Total	205	49	24%	434	64	15%

We observed that:

- ❖ The inspection of institutes, before selection and during currency of the course, was not being regularly done by DRZs. Out of 120 selected institutes, inspection of only 16 institutes was done before their selection. Due to non-inspection of institutes during currency of courses, adequate infrastructure and training faculty, quality of training and punctuality of trainees was not ensured.

- ❖ Records of the two DRZs *i.e.* Lucknow and Pune revealed that on an average 24 *per cent* and 15 *per cent* institutes respectively were inspected during the last five years.

- ❖ No guidelines were issued either by the ESW or DGR as to how and under what mechanism the Inspection of Training Institutes would be conducted.

The Ministry, in its reply (February 2016), while admitting the fact regarding inspection of institutes / courses by DRZs, stated that the mechanisms for inspection of institutes by DRZs and the guidelines on the subject would further be strengthened and improved by including RSBs/ZSBs and Command HQs, which would be awaited.

Thus in the absence of inspection there were no checks on the institutes about the quality of training being imparted to the ESM, actual number of trainees benefitted from it and genuineness of the claims of institutes regarding the attendance of trainees.

2.1.7.3 Training of Ex-Servicemen (Personnel Below Officers Rank) at Zila Sainik Boards

DGR also conducts training for ESM (PBORs) at ZSB. In May 2006, DGR, formulated and circulated the revised ESM Training Policy to all RSBs/ZSBs. As per the policy, Schedule of Training (SoT), showing the details of courses planned, institute where course would be conducted and duration of course, *etc*, is required to be forwarded by RSB/ZSB to DGR for approval.

For carrying out training through Institutes, each year DGR sub-allots funds to RSBs/ZSBs out of the funds received from Directorate General of Financial Planning (DGFP). An amount of ₹2.71 crore was allotted by DGR during 2010-11 to 2014-15 to RSBs/ZSBs, against which ₹28.8 lakhs only were expended for conducting 58 training courses for 566 ESM by Zila Sainik Board, and ₹ 2.42 crore was surrendered to DGR.

We observed that:

- ❖ Contrary to training Policy, details of institutes, courses to be conducted during the year, *etc*. were not forwarded to DGR by the RSBs/ZSBs, which had resulted in excess allotment of ₹ 2.42 crore to the RSB/ZSB by DGR and consequently surrendered during the years 2010-11 to 2014-15.

The Ministry, in its reply (February 2016), while admitting the fact of excess allotment of funds to RSBs/ZSBs, stated that the point is noted and the procedure would be streamlined for compliance.

2.1.7.4 Placement of Ex-Servicemen Trainees

The role of DGR is to empower retiring/retired service personnel with additional skills through training courses and assist them in choosing second career through employment/self-employment schemes and liaise with Corporate/Private Sector to seek greater employment opportunities for ESM and act as the interface between retired service personnel, dependents and the outside environment for resettlement/second career.

Each year, Officers ranging between 2000-2500, and JCO/ORs ranging between 47,000-60,000, retire from the Services totalling to 2,80,147 during last five years. Training to 1,17,313 personnel was imparted by DGR and ZSBs after incurring an expenditure of ₹ 90.98 crore. Out of total 1423 ESM trained, 566 ESMs were trained at Zila Sainik Board (ZSB) with an expenditure of ₹29 lakh. The number of Officers/JCOs/ORs and ESM trained during the last five years is shown in **Table-10** below:

Table-10: Number of Officers/JCOs/ORs trained

Year	Officers	JCO/ORs	ESM	Total
2010-11	754	17743	843	19340
2011-12	863	22577	269	23709
2012-13	748	20740	95	21583
2013-14	562	21991	175	22728
2014-15	**616**	29296	41	29953
Total	**3,543**	**1,12,347**	**1,423**	**1,17,313**

(Date compiled from DGR records)

We observed that there DGR had instituted no mechanism to find out the number of trained personnel who were successfully placed for employment. No records were being maintained to assess the job placement for the trained personnel. In the absence of such monitoring, fulfilment of desired objective and mandate of DGR to train the Defence Personnel for smooth transition towards second career is not established. This is attributable to the fact that no system is in place with DGR to liaise with the Corporate Sector or incorporate a clause in the agreement with the Institute for job placement assistance to the trained ESM. Thus, the purpose for spending money (₹90.98 crore) on training could not be ensured.

The Ministry, in its reply (February 2016), while admitting the fact regarding monitoring of placement, stated that the shortcomings were identified almost two years back and corrective measures were being taken. To address the issue, placement assistance for a period of two years would be provided by all institutes empanelled since 2014 and a six monthly report be obtained there from. Further, a Placement Assurance Training (PAT), a pilot project has been initiated. MoU with Confederation of Indian Industry (CII) had been signed for enhancing placement opportunities and interaction with Corporate World. The fact remains that proper corrective measures and placement assistance are yet (February 2016) to be implemented and only three PAT courses were conducted during 2015-16.

A. Delay in conducting Placement Assurance Training (PAT)

In October 2012, DGR mooted a proposal to the ESW regarding PAT, which emanated from a suggestion of Advisor to Hon'ble Prime Minister, for a Pilot Project on 'Specialized Placement Assured Training courses for ESM for the year 2013-14 to give minimum 70 *per cent* placement to ESM who attended any training programmes being conducted by DGR. The idea behind such type of courses was to focus more on job oriented training for a limited duration. For this purpose, the training organizations were also to be incentivized to ensure placement of ESM. The Hon'ble RRM gave the approval for PAT in July 2013.

We observed that the DGR in September 2013 invited Expression of Interest (EOI) for PAT but the matter remained shuttling between DGR and ESW for deciding the courses. After 24 months DGR selected/planned three courses to be conducted between July and December 2015 with the condition that the institute guarantees job placement of 50 *per cent* and above of the trainees.

Thus, no initiative was taken by the ESW/DGR to conduct PAT and after its approval in July 2013, such courses were planned to be conducted after a delay of two years depriving the ESM of job guarantee.

The Ministry, in its reply (February 2016), while admitting the fact regarding delay in conducting PAT, stated that the same was delayed due to various factors such as payment terms, percentage of assured placements, nature of jobs offered, *etc*. The fact remains that the DGR's initiative of October 2012 of PAT did not fructify due to lack of planning and decision making at DGR & Ministry's level.

B Poor implementation of Reservation policy

As per Govt. of India, Ministry of Finance orders[7], ESM have been given reservation in Central Govt. Departments/Central PSUs, Banks, Central Para Military Forces (CPMF) *etc*. in Direct Recruitment as shown in the **Table-11** below:

Table-11: Reservation of Group 'A', 'C' and 'D' Posts

Name of Organization	Group 'A' Posts	Group 'C' Posts	Group 'D' Posts
Ministries / Deptts	-	10%	20%
CPMF	10%	Not Available	Not Available
PSUs	-	14.5%	24.5%
Banks	-	14.5%	24.5%

(Source: Govt of India Orders)

The matter of reservation for ESM re-employment was being dealt by the Cabinet Secretariat and the responsibility was passed on to ESW/DGR in July 2012. The role of DGR in regards to Reservation Policy was to implement the DOPT policy in Govt organizations. The DGR compiles and analyzes the information provided by the various Organizations and those which do not have the prescribed percentage of ESM in their organization were requested to fill up the posts reserved for ESM by them. The ESW, after two years, *i.e.* in August 2014 circulated the matter to all Ministries/Departments to send all such reports on half yearly basis and called for first report for the period ending December 2013 immediately. Out of 412 Ministries/ Deptts, only 135 Deptts had responded to the DGR between September 2014 and February 2015.

We noticed that in 135 departments, whose data were available with the DGR, against authorization of 1,03,648 ESM, only 25,606 ESM (25 *per cent*) were employed as of March 2015 under reservation policy, leaving a deficiency of 78,042 ESM. Thus, reservation policy of the Central Government for employment of ESM was not being effectively implemented and monitored by DGR since June 2012.

[7]Govt orders issued in December 1979, March 1980, May 1988 and Gazette Notification of October 2012.

The Ministry, in its reply (February 2016) stated that considerable number of Central Government Ministries/Departments and CPSUs are not forwarding data for monitoring of implementation policy despite requesting them to furnish the requisite data. Cabinet Secretariat has mandated ESW to collect and compile data in respect of implementation of reservation policy, however, ESW has not been empowered to monitor the reservation vacancies, which continues to be in the jurisdiction of DOP&T.

The reply furnished by the Ministry is not acceptable as the ESM welfare and their rehabilitation/reemployment is the mandate of ESW/Ministry, and therefore it was the responsibility of DGR to collect, compile and forward data regularly to DOPT for effective implementation of Reservation Policy of ESM.

2.1.8. Employment

The role of DGR is to empower retiring/retired service personnel with additional skills through training courses and assist them in choosing second career through employment/self employment welfare schemes. The Ministry has launched one Employment and ten Self- employment schemes for resettlement / rehabilitation of Ex-Servicemen/Widows/Dependents. DGR sponsors and monitors these schemes through its Employment and Self-employment Directorates.

The Employment Directorate is responsible for registration of Ex-Servicemen, sponsoring them for employment and monitoring of functioning of DGR empanelled Security Agency Scheme**.** The Self-Employment Directorate is responsible for employment and functioning of ESM Coal Loading and Transportation Companies, Tipper Attachment for widows and disabled ESM, issue of Eligibility Certificate for Allotment of Oil Product Agencies, sponsorship for Company Owned Company Operated (COCO) Scheme and CNG in NCR, sponsorship for Allotment of Mother Dairy Outlets / Safal Outlets for retired JCOs/ORs and facilitate allotment of Army Surplus Vehicles to ESM / Widows through Master General of Ordnance's (MGO's) Branch Army HQ.

We found that all the DGR sponsored schemes are more than 10 years old. Over these years no new scheme has been proposed / introduced by the DGR/Ministry for the welfare / self-employment of the ESM. This is despite two independent Directors working exclusively for Employment and Self-Employment Schemes at DGR. Further, no review of the schemes has been carried out knowingly that the ESM had hardly any interest in old vintage/surplus vehicles, there was no adequate load for Coal companies, the war widows were not getting the requisite 8 *per cent* quota for Oil Product Agencies as per orders of MOP&NG, no interest of ESM was noticed in the Gopaljee Diary Scheme and for CNG outlet 60 *per cent* ESM were not getting jobs in the absence of MoU. No modification / modernization had been carried out by the DGR/Ministry to the old schemes as several schemes appear to struggle for existence due to change in the working environment ever since their inception**.**

Audit examination of one Employment and seven Self-employment schemes further revealed that the schemes are not being monitored properly and ESM have been deprived of the intended benefits of the schemes as discussed below:

2.1.8.1 Employment Scheme

Security Agency Scheme

The DGR began sponsoring Security Agencies from 1992 onwards to ensure a resettlement opportunity for the ESM. Government of India/Department of Public Enterprises in November 1994 instructed all the Central Government Public Sector Undertakings / Enterprises (CPSUs/CPSEs) to take security cover from the Security Agencies sponsored by the DGR. The guidelines for the Security Agencies were issued/revised from time to time and finally revised in July 2012 (amended in January 2013).

ESM (Officers) apply to DGR for the empanelment of Security Agency. Demand for Security Guards is received from CPSUs/CPSEs. ESM (ORs) are deployed as security guards by the Proprietors of ESM Security Agencies. The DGR sponsor empanelled Security Agencies in cyclic order of their seniority to the CPSUs/CPSEs who carry out tendering for final selection. The ESM (O) has to submit license obtained from State Government under Private Security Agency Regulation Act (PSARA), 2005 for operating the Security Agency. However, the Ministry in July 2012 relaxed this condition making the ESM eligible for operating Security Agencies on furnishing of acknowledgment of application submitted for PSARA license which was subsequently withdrawn with effect from April 2015. At least 90 *per cent* ESM would be employed by the Individual ESM Security Agency. Each Security Agency is required to furnish six monthly Guards Updation Strength Report to DGR duly countersigned by the Principal Employers i.e. CPSUs.

Audit Comments:

- Audit examined documents in respect of 303 security agencies; out of which 215 Security Agencies (71 *per cent)* were Held in Abeyance (HIA) i.e. temporarily non-operational as of September 2015. Out of 215, 184 Security Agencies were HIA due to non- submission of PSARA license and remaining 31 were HIA due to other reasons such as non-submission of six monthly Guards Updation Strength Reports, non-deployment of ESM guards to the extent of 90% of total guards, Show Cause Notices issued *etc*. No efforts were made by DGR to facilitate early issue of PSARA license to ESM Security Agencies by the State Governments. Thus, ESM had been deprived from the intended benefit of the scheme.

- There is no mechanism in place for inspection of the Security Agencies as no SOP / guidelines have been issued by the DGR in this regard. Moreover, no inspection programme for inspection of the Security Agencies was prepared by the audited two DRZs. In the absence of proper inspection, legitimate deployment of ESM guards and fulfilment of their entitlement could not be ensured.

- The six monthly Updation Strength reports were being sent by the Security Agencies to DGR without countersignature of the principal employers as required under the rules. In the absence of which, authenticity of the legitimate deployment of ESM guards could not be ensured.

The Ministry, in its reply (February 2016), admitted the points for compliance and stated the issue of large number of security agencies coming under HIA status was immediately addressed by the DGR. Meetings were held and matter was taken up with the concerned authorities and States like Andhra Pradesh and Maharashtra have started issuing PSARA licenses. The number of PSARA holding license security agencies has shot up from 29 *per cent* to 43 *per cent*. The SOP for inspection has been prepared and same will be circulated amongst all inspecting agencies.

The fact remains that the considerable percentage *i.e.* 57 *per cent* security agencies are still temporarily non-operational mainly due to non-submission of PSARA license in Maharashtra and Andhra Pradesh. Further, the SOP prepared for inspection of Security Agencies is still at the circulation stage. Thus, ESM had been deprived of the intended benefit of the scheme.

2.1.8.2 Self-Employment Scheme

(A) Allotment of Army surplus vehicles to ESM / their widows / ESM Co-operative societies

The scheme 'Allotment of Army surplus vehicles to ESM / their widows / ESM Co-operative societies' was introduced in January 1962. The Ministry issued / revised guidelines from time to time for the operation of the scheme which was finally revised in April 2006.

The DGR register the names of willing eligible ESM / their widows and forward their names as per Roaster to the Army HQ, Master General of Ordnance (MGO) Branch for allotment of Army surplus vehicles at the price fixed by the Ministry. The applicant has to deposit Security (₹1,000, ₹3,000 & ₹8,000 depending on the type of vehicles) with the DGR, which will be forfeited and transferred to the Government treasury quarterly if the applicant does not claim for refund of the security deposit from DGR within 18 months from the date of issue of release order of the vehicle. MGO's Branch are required to intimate the DGR about the details of release orders for issue of the vehicles and vehicles collected from the Depots.

Audit findings related to deficiencies in the scheme as observed during audit are discussed below:

- There was steep decline in registration for the Army surplus vehicles by the ESM, which was 1082 nos. in 2010 slashed to 67 nos. in 2014. Evidently, ESM have hardly any interest for Army surplus vehicles which reflects adversely on the overall success of the Scheme.

- The waiting time for the vehicles was alarming. In certain cases, it ranged from 10 to 20 years, which forced the applicants to go for cancellation of the registration.

- There was lack of coordination between DGR & Master General of Ordnance Branch (MGO's Branch) as the requisite data i.e. the details of release orders for the vehicles issued by MGO's Branch and vehicles collected by applicants during 2010 to 2014 from Depots were not sent to DGR by MGO's Branch and Depots concerned respectively.

- DGR had made Fixed Deposits (FDs) of ₹4.50 crore in November 2010 out of security deposit amount accumulated with them. The details of calculation of ₹ 4.50 crore was not furnished and neither this was audited by Internal Audit. However, no such provision of term deposit exists in the MoD's guidelines of April 2006.

Ministry, in its reply (February 2016) have admitted the shortcomings such as sharp decline of interest shown by ESM due to lack of interest in vintage vehicles, poor availability and non coordination between DGR and MGO's Branch. The Ministry sidetracked the audit comments on maintaining Non Public Fund Accounts for Security Deposit and the details of ₹4.50 crore, which was ESM money and kept in term deposit. Thus, the intended benefit to the ESM has not been derived from the scheme.

(B) ESM Coal Loading and Transportation Scheme

The Scheme was formulated to raise ESM Coal Loading and Transportation Companies between erstwhile Ministry of Energy and Ministry of Defence in 1979 with the aim of having union free captive transport organizations in Coal Subsidiaries and providing an opportunity to ESM for resettlement. Memorandum of Understandings (MoUs) of April 1999 and December 2013 signed between the Coal India Ltd (CIL) and DGR set out the guidelines for the formation and running of ESM Coal Loading and transportation Companies at the Coal Subsidiaries of CIL. Clause 18 of the MoU (April 1999) provides that modalities of fixing rates and escalation to be paid yearly will be formulated by Coal India Ltd. in consultation with DGR. Further, Clause 13 of MoU (December 2013) and its addendum of April 2014 stipulate that minimum guaranteed works commensurate to 80 *per cent* of its fleet capacity in a year would be given to ESM Coal Companies by the CIL Subsidiaries.

On receipt of requisition from the CIL coal subsidiary, the DGR sponsor ESM Coal Pvt. Ltd. Company having five eligible ESM (Officers) as Directors. The ESM Coal Company starts with a minimum of 1 Pay loader and 10 tipper trucks which is further enhanced at the stipulated time interval. The ESM Coal Company is required to employ ESM/their widows/dependents to the extent of 75 *per cent* of total regular employees. The ESM Company is permitted to operate for 05 years extendable to 09 years from the date of commencement of the work.

The Scheme has two sub-scheme linked with it, which are discussed below:

(i) Tipper Attachment Scheme for eligible ESM (PBOR):

The scheme has been instituted to provide an opportunity to ESM Pan India to partake in the ESM Coal Transportation scheme through attachment of a tipper truck.

(ii) Tipper Attachment Scheme for Widows/ Disabled ESM / Dependents:

The DGR sponsors eligible widows/disabled ESM / dependents who make one-time refundable deposit of ₹ 1.00 lakh for five years with ESM Coal Company which in turn pays back fixed remuneration of ₹ 3,000/- per month to them. DGR will attach 20 widows/disabled ESM/dependents against 10 tippers owned by the ESM Company.

We observed that:

- ❖ There were six Coal Subsidiaries of CIL for operation of ESM Coal Loading and Transport Companies as shown in **Annexure-III**. Out of these only three are sending demands for ESM coal companies. Two CIL Subsidiaries stopped sending demands for ESM coal companies since 2009 and in remaining one subsidiary, only one ESM Coal Company is operational since May 2008. As 50 *per cent* of the CIL Subsidiaries meant for ESM were non-operational, the ESM have been deprived of the desired benefits of the scheme.

- ❖ Contrary to MoU for yearly rate revision and escalation to be paid by CIL in consultation with DGR for coal transport work, rate revision was done in 2008 and 2012 i.e. after a gap of four years without involving DGR. No rate revision was done after 2012 till date. Thus, ESM coal companies were deprived of the intended benefits from revision of rate.

- Audit scrutiny of the inspection reports regarding inspection of the ESM Coal companies by two DRZs, i.e. Lucknow and Pune during 2010-11 to 2014-15 revealed the following irregularities in the functioning of the scheme:

- As per MoU, at least one Director should be present at the work sites but no Director was present at the work site during the time of inspections. Further, no ESM was present and private trucks were operating in Coal mines sites. Pay loaders / tippers attached by ESM remained idle as the works were given to civil contractors.

- The work orders for coal transportation were placed on ESM coal companies for short duration i.e. three months to one year and no fixed quantity of coal to be transported by the ESM coal companies was laid down.

- All works of coal loading and transportation in one CIL Subsidiary *i.e.* Western Coal Field Ltd. (WCL), Nagpur were put through the process of tender. Any work that was refused / turned down by civil contractors due to either economical un-viability or external factors was offered to ESM coal companies through post written consent. As the ESM coal companies cannot take part in the tendering process, they have to wait for completion of tendering procedure for award of work. This practice was against the MoU signed between DGR and CIL as the MoU assured for allocation of minimum guaranteed work to the ESM company.

The Ministry, in its reply (February 2016), admitted the points for compliance and stated that presently the ESM Coal Companies are being sponsored to four CIL Subsidiaries out of six subsidiaries. Two CIL subsidiaries stopped sending demands for ESM Coal Companies since 2009. The matter of this decision of CIL which was without reference to DGR would be taken up with CIL for restoration of employment avenues with all the subsidiaries. The matter of rate revision was taken up with DGR on several occasions and for which CIL has now constituted a study group in August 2015 for revision of the rates. Further, it was stated that the point of presence of Directors at work site would be specifically checked by DRZs during inspection and adequate work commensurate to 80% of fleet capacity in a year would be provided to each of the ESM coal companies.

The fact remains that after August 2012, no rates have been revised so far and the study group constituted in August 2015 by the CIL is still to give its report for revision in the rates. Thus, the ESM are deprived of the legitimate dues to be paid to them. Further, the DGR have to take follow up action to address the irregularities noticed by the DRZs during inspection of ESM Coal Companies working at CIL Subsidiaries.

(C) Oil Products Agencies/LPG Distributorship Scheme

The scheme for allotment of Oil Product Outlets and LPG Agency both in rural and urban areas was introduced for rehabilitation and resettlement of disabled Armed Forces personnel of three Services, war widows and their dependents with the concept to recognize the sacrifice of Defence personnel for the Nation. The beneficiary of the scheme is governed by Ministry of Petroleum and Natural Gas (MOP&NG) orders issued in consonance with MoD in October 2000 which laid down 8 *per cent* reservation for the Defence Personnel for allotment of Retail Outlet for Petrol, High Speed Diesel, Kerosene Oil and Liquefied Petroleum Gas (LPG).

However, orders of the MOP&NG regarding 8 *per cent* reservation for ESM were revised from time to time by the Oil Companies *i.e.* Indian Oil Corporation Ltd, Hindustan Petroleum Corporation Ltd and Bharat Petroleum Corporation Ltd and reservation percentage for ESM had been diluted without involving MoD as shown in **Annexure-IV**.

Audit examination of the scheme revealed as under:

- The Oil Companies have diluted the 8 *percent* reservation for Defence Personnel by including the Paramilitary personnel, Central/State Govt. and Central/State PSUs employees in this category and also making it class based reservation (Open class, OBC, SC/ST) in respect of LPG Distributorship and Retail Outlet Dealership schemes. The impact of inclusion of other employees in the Defence Personnel category is corroborated by the steep declining trend in issue of Eligibility Certificates (533 in 2010 to 65 in 2014) by the DGR as shown in **Annexure-V**. As such number of ESM beneficiaries under the scheme had drastically reduced.

- The dilution in reservation led to various complaints from the ESM/Widows/Dependents regarding non-allotment of Retail Outlet/LPG Agency to them but DGR office was not in a position to resolve the issues on the plea that short-listing, interview, selection, allotment of Retail Outlets/ LPG Agencies is the sole prerogative of the Oil Companies and DGR has no say in it except issue of Eligibility Certificates. However, DGR had not taken up the matter with the MOP&NG to save the reservation quota for the ESM.

- There is no mechanism with DGR to ensure that reservation percentage as laid down by the MOP&NG is actually given to the ESM as no vacancy position is reported by the MOP&NG to DGR. The ESW/DGR have no involvement in the scheme except issue of Eligibility Certificate, which is a flaw in the scheme.

- The details of beneficiaries who have been allotted Retail Outlets/LPG Agencies by the Oil Companies are not available with DGR as the details are not furnished by the Oil Companies. As such DGR had not monitored the scheme effectively.

The Ministry, in its reply (February 2016), have stated that revisions in reservation quota were incorporated by the Oil companies without involving DGR and for which a meeting chaired by the DGR with representative of MOP&NG, MoD (DESW) and members of oil companies was held in the office of the DGR in August 2015 for restoration of 8% policy for allotment of oil product agency under Defence Quota without bifurcation of quota on caste basis reinstating the priorities on level of sacrifice of defence personnel.

The fact remains that Ministry has failed to take up the matter effectively with MOP&NG on the issue of arbitrary dilution of reservation quota for ESM by the Oil Companies to safeguard the interest of war widows.

(D) Compressed Natural Gas Outlet Manager Scheme

The Compressed Natural Gas (CNG) Outlet Manager scheme was introduced in 2001 with the aim to provide trouble free supply of CNG to the vehicle owners in Delhi/NCR by employing ESM (O) as CNG Outlet Managers under Company Owned Company Operated basis. The DGR and Indraprastha Gas Ltd. (IGL) in September 2001 formulated a draft MoU to lay down suitable guidelines to ensure smooth running and consistency of the scheme. As per the draft MoU, the manager will employ maximum ESM (PBORs) not less than 60 *per cent* of the authorised staff for the CNG station.

We observed that:

❖ The draft MoU has not been signed for more than a decade as IGL was not inclined for the same and the scheme is being run without any MoU. In the absence of the MoU, the basic condition of employing minimum 60 *per cent* ESM at the CNG stations cannot be enforced.

❖ Contrary to the extant procedure, the panel of ESM (O) for sponsoring to IGL are not prepared by a BoOs as ESW representative was not attending DGR office for this purpose.

The Ministry, in its reply (February 2016), admitted the points raised by audit and at the same time confirmed that the scheme is running successfully, which is not tenable as in the absence of MOU signed by the IGL, the 60 *per cent* authorization of ESM for CNG station could not be ensured.

(E) Company Owned Company Operated (COCO) Retail Outlet Scheme

The COCO Retail Outlet scheme is operated by the designated Company Officer and manpower & other services are to be provided by the selected Service Provider for day to day efficient operations. The Oil Companies approach the DGR for sponsoring the names of ESM(O) for Service Provider to be selected after interview of such sponsored ESM(O). The DGR will make efforts to obtain feedback from the concerned Oil Company and display result of the sponsored candidates on the notice board.

During the period from 2010 to 2014, as against the total requirement of 739 projected by the Oil Companies, the DGR had sponsored names of 2105 ESM(O). However, the record of ESM(O) employed by the Oil Companies has not been maintained by the DGR.

We observed that:

- Apart from DGR, the KSBs/RSBs were also sponsoring the ESM(O) directly for the scheme who have also taken the benefit of Security Agency scheme from DGR, which is contrary to the rule position that an ESM can avail the benefit of only one scheme.

- The DGR had not obtained feedback from the Oil Companies relating to number of ESM (O) selected/employed by the Oil Companies. In the absence of which the extent of benefit derived from the scheme to the ESM could not be known.

The Ministry, in its reply (February 2016), admitted all the points raised by audit and confirmed to take remedial measures in the scheme.

(F) Mother Dairy Scheme

The role of the DGR under the Mother Dairy Scheme, started in November 1974 in Delhi and NCR, is to sponsor the names of ESM to M/s Mother Dairy for allotment of milk / SAFAL booths as per the MOU entered into between DGR and Mother Dairy. The selected candidate shall be required to enter into an agreement with the Mother Dairy within ten days of declaration of result and to submit security deposit of ₹ 1.00 lakh. Thereafter, training relating to running and operating the booth will be organized for the ESM for two weeks. On completion of successful training, the booth is allotted as per the seniority.

We observed that selected ESM had to deposit a considerable amount (₹1.00 lakh) on account of security deposit at the time of agreement with Mother Dairy. However, allotment of booth was made after successful training and availability of booth as per the seniority of the ESM, resulting in blockage of hard earned money of the ESM with Mother Dairy. In a case where delay occurred in allotment of booth for almost seven months, the DGR took up the matter (February 2011) with Mother Dairy to charge ₹ 1000/- at the time of agreement and balance of ₹ 99,000/- at the time of allotment of booth to eliminate the risk of blocking the ESM money for an inordinate time. Nevertheless, the DGR in February 2012 signed the MoU without incorporating such clause of security deposit in MoU which is against the welfare measures for ESM.

The Ministry, in its reply (February 2016), admitted the points raised by audit and stated that the clause of Security Deposit to be deposited in two instalments i.e. ₹1000/- at the time of selection and ₹ 99,000/- at the time of allotment of booth could not included in MoU by oversight in year 2012 and the same would be taken up with Mother Dairy earliest which would be awaited.

(G) Gopaljee Dairy and Fresh Farm scheme

The role of the DGR under the Gopaljee Dairy and Fresh Farm Scheme is to sponsor names of ESM (PBORs) for allotment of the milk / Fresh Farm booths on receipt of requisitions from GDFPL under two MoUs signed between DGR and M/s Gopaljee Dairy Foods Pvt. Ltd. (GDFPL) in August 2012 and March 2013

During the last three years, against their demand of 43 Milk Booths and 8 Fresh Farm Booths, only 21 Milk Booths and 08 Fresh Farm Booths respectively were allotted by GDFPL to the ESM. Thus, the scheme is not encouraging and no review of the scheme was conducted at Ministry's level to discontinue the scheme.

The Ministry, in its reply, admitted the points raised by audit and stated that over the years the response and interest on the scheme was not found encouraging and an urgent review of the scheme after obtaining feedback from the users will be done.

2.1.9 Improper Budget Formulation Exercise

The budget projections are made by the DGR directly to Director General Financial Planning (DGFP), IHQ of MoD (Army) and the allotment is made by the DGFP for conducting training and allied activities.

Total allotment and expenditure for the years 2010-11 to 2014-15 is shown in **Table-12** below:

Table-12: Allotment and Expenditure for the year 2010-11 to 2014-15

(₹in crore)

Year	Allotment	Expenditure	Savings (+) / Excess (-)
2010-11	21.30	21.30	0.00
2011-12	17.48	16.76	(+) 0.72
2012-13	18.23	18.23	0.00
2013-14	18.50	18.50	0.00
2014-15	19.98	19.98	0.00
Total	95.49	94.77	(+) 0.72

(Data provided by DGR)

Above 94 *per cent* of the total budget was spent each year on the training of retiring/retired Service Personnel and remaining six *per cent* on Publicity, Information Technology, Contingencies, *etc*.

We observed that:

- The budget process was not routed through the ESW although in a meeting of March 2009 Joint Secretary ESW pointed out that the budget formulation of DGR needs to be changed and ESW should fully be involved and all budget proposals were to be routed through them.

- Budget was not projected based on the courses to be undertaken during the year. During 2010-11, 2011-12 & 2014-15, there was an increase in budget allotment ranging between 5 *per cent* to 10 *per cent* and in the years 2012-13 and 2013-14, there was no increase in budget allotment in respect of previous year, which had resulted in cancellation of 208 course in 2010-11 due to shortage of funds.

- Funds to the tune of ₹1.5 crore were approved by ESW in November 2010 and made available to DGR from Armed Forces Flag Day Fund (AFFDF), a Non-Public Fund Account. Out of which, payment of ₹1.46 crore for 50 training Institutes was released in April-September 2011 without deducting TDS of ₹3.09 lakh from the training institutes.

The Ministry, in its reply (February 2016) stated that the forecast, planning, allotment, utilization and audit is a major policy decision which has wide ramifications. While admitting the point regarding non-deduction of TDS, Ministry informed that a case would be taken up for its regularization, which was awaited.

Conclusion

The re-employment training and rehabilitation schemes were conceived with well thought ideas but the review of the functioning of DGR revealed that the intended benefits to ESM as envisaged, could not be derived due to irregularities and shortcomings as discussed in the foregoing paras:

- Sponsoring of names for various trainings was not done objectively as selection of trainees had not been done by a requisite committee. Hence, the considerations of area where skill require are upgraded for resettlement is not established.

- There was no transparency in selection of institutes for training. While the institutes which did not fulfil the eligibility criteria were selected for awarding courses yet certain institutes fulfilling the eligibility criteria had been rejected. Four institute, were selected, which were not even registered/affiliated.

- Courses were not selected judiciously as in certain courses turnout of the trainees was below 10 *percent* of the total vacancies and instead of job oriented courses, unwarranted courses were conducted.

- Adequate inspection by the DRZs was a tool for monitoring. However, due to inadequate inspection availability of adequate infrastructure and faculty with the training institutes, quality of training, attendance of participants was not ensured.

- The DGR had no record to find out the number of ESM who got re-employed after training. Hence, achievement of desired objectives of DGR and value for money expended (₹ 90.98 crore) on trainings could not be ensured.

- DGR sponsored schemes, except Mother Dairy Scheme, for resettlement of ESM/Widows/Dependents have not proved encouraging.

- The ESW/DGR had not initiated adequate measures to monitor the effective functioning of the schemes, which had deprived the ESM of the intended benefits of the schemes.

Recommendations

➢ Ministry's guidelines on selection of trainees by a committee comprising of representatives of MoD, DGR and Services need to be adhered to for fair and proper selection of the trainees. Adequate criteria need to be drawn for selection of trainees.

- Selection of training institutes be done in a fair and effective manner after evaluation of their performance by the committee and norms should be framed for fixation of course fees.

- For better placement of the ESM, focus should be on Placement Assured Training (PAT) courses. Data regarding employment of trained ESM may be maintained by DGR to monitor the effectiveness of the trainings being imparted.

- A mechanism should be designed by the DGR to liaise with the Corporate/Private Sector to seek greater employment opportunities for ESM and a clause to provide job placement assistance to the trained ESM may also be incorporated in the agreement with training institutes.

- Director Resettlement Zones (DRZs) should conduct proper inspection of the training institutes/courses and DGR's sponsored schemes. To have sound budgetary formulation, annual budget proposals of DGR may be based on courses to be conducted during the year and routed through ESW.

2.2 Supply Chain Management of Rations in Indian Army-Follow up Audit

Ministry implemented only two out of 12 recommendations of PAC directly related to activities of Supply Chain Management of ration despite acceptance and assurance given in 2013. As a result, activities related to provisioning/ procurement, testing, distribution of ration could not be improved and satisfaction level of the troops, particularly in Northern and Eastern Command remained low.

2.2.1. Introduction

Audit Reports are essentially a means to improve performance and accountability which can be achieved through implementation of its recommendations. Follow-up audit refers to the practice where Audit examines the corrective action of the Ministry, taken on the basis of the recommendations of the previous Performance Audit, accepted by the Ministry.

Comptroller & Auditor General of India's Report No 6 of 2010-11, Union Government (Defence Services) on Performance Audit of "Supply Chain Management of Ration in Indian Army" (PA Report) was tabled in the Parliament on 3rd August 2010. The Public Accounts Committee (PAC) selected the report for detailed examination during 2010-11 and brought out 15 recommendations/observations in their 47th Report (15th Lok Sabha) presented to the Parliament in December 2011. Ministry had accepted all the 15 recommendations/observations (11 in their Action taken Note of March 2013 and four in the Action taken Statement of March 2014) for implementation.

2.2.2. Scope of Audit

The follow-up audit covered a two year period from 2013-14 and 2014-15 *i.e* the period after adoption in the PAC Report of March 2013. The audit was carried out from June 2015 to October 2015, covering office of the Director General Supplies and Transport (DGST), Army Purchase Organisation (APO), four Command Headquarters (Northern, Western, Eastern and Southern) and one Corps Headquarter and three Supply Depots (including two consumer units under each Supply Depot) in each selected Command, including Composite Food Laboratories (CFLs)/ Food Inspection Units (FIUs) located at Jammu, Delhi, Mumbai and Bengdubi. Eight items of dry ration *viz*., Atta, Rice, Sugar, Dal, Tea, Edible Oil, Malted Milk Food and Tinned Jam and the entire range of fresh rations were covered during the follow-up audit. Selection of units and items of ration was generally aligned with those selected in the original PA.

2.2.3. Audit Objectives

The follow-up audit was conducted with the aim to verify the compliance to 15 recommendations of the PAC, accepted by the Ministry in 74th report of PAC presented in parliament in March 2013 and their Action taken Statement issued in March 2014.

2.2.4. Audit Criteria

The criteria for evaluating implementation of the audit recommendations were derived from:-

- Observation/ recommendations of PAC's 47th Report (15th Lok Sabha);
- PAC's 74th Report on Action taken by the Government on observations/recommendations of PAC contained in their 47th Report;
- Action Taken Statement issued by the Ministry vide Office Memorandum F. No. 4(6)/2011/D(QS)(Vol III) dated 11th March 2014

2.2.5 Audit Findings

As a follow up Audit, we examined the implementation and the corrective action taken by the Ministry against 12 out of the 15 accepted recommendations, which were related to the activities directly related to the Supply chain management of ration. The remaining three recommendations a) Introductory b) Delay in response to Audit Report by the Ministry c) Compliance to the proposals given by High Level Committee (HLC) constituted by the Ministry to analyze the recommendations of the CAG were procedural in nature and therefore not brought out in the report.

Issue wise findings of the Audit examination are described as follows;

2.2.5.1 Provisioning of dry ration

As observed in paragraph 2.1 of the PA report, the requirement of ration was centrally determined by the Ministry more on a normative basis rather than on actual data. Neither DGST nor the Ministry had at their disposal correct figures of feeding strength and available stock balances which varied at different levels and thus the process was exposed to the risk of over/under provisioning of ration. The PAC noticed that the Standard Operating Procedure (SOP) had become outdated and needed to be revisited and updated in consonance with the constantly changing requirements. The recommendations were accepted by the Ministry and corrective action taken. The revision of SOP was confirmed to PAC in March 2013.

During the follow-up audit, it was noticed that significant variations continued to exist between the annual requirements of dry rations projected by Command Headquarters to the DGST and the demand worked out after consolidation of the Stock Return and Demand Statements (SRDS) received from the lower echelons under its control. We observed that the Command Headquarters changed the demands, both by increasing and decreasing the quantities, received from lower formations. The increase was found to the extent of 48 per cent in case of Sugar in 2013-14 by Southern Command, whereas the quantities of Jam Tinned were decreased by the same Command in the same year by 44 *percent.*

Notwithstanding the demands worked out by the Command Headquarters, DGST again independently worked out the requirement of dry rations. Significant variations were observed between the quantities demanded by the Commands and the requirement worked out by DGST. For instance, the requirement of "Tea" worked out by DGST in 2013-14 was 3500 Metric Tonnes (MT) against the aggregate demand of 3199 MT of all Commands i.e. excess of 301 MT. On the other hand, the requirement of "Dal" worked out by DGST in 2014-15 was 8752 MT short of the combined demand projected by the Commands. Variation between quantity demanded by Commands and the quantity projected by DGST is shown in **Table-13** below;

Table-13: Variation in projection of quantities by Command Headquarters and DGST

Item	2013-14			2014-15		
	Commands (in MT)	DGST (in MT)	Percentage variation	Commands (in MT)	DGST (in MT)	Percentage variation
Atta/Wheat	125558	124988	0	139370	123000	-13
Rice	114070	121000	6	119214	120000	1
Sugar	38980	37600	-4	47298	39000	-21
Dal	38853	37500	-4	45752	37000	-24
Edible Oil	33620	34300	2	38253	34000	-13
Tea	3199	3500	9	3454	3400	-2
MMF	4299	4000	-8	4785	4400	-9
Jam Td	1034	1050	2	1207	1100	-10

Further the annual requirement worked out by the Army HQ was again changed by the Ministry. The quantities arrived at by the Ministry was again worked out on normative basis, mainly after discussion and mutual agreement between the DGST. This was despite the figures and inputs furnished by the lower formations based on the actual feeding strength and stocks available on ground. As a result, the requirements finally accepted by the Ministry was short up to 20 *per cent* in 2013-14 and up to 23 *per cent* in 2014-15 in comparison to the projections made by the Army HQ. Audit observed that due to absence of objectivity in working out the quantities of ration, the purpose of revision in SOP was compromised, as the final approval of quantities continued to be made on normative basis **Table-14** shows the quantities projected by Army HQ and those negotiated with Ministry.

Table-14: Quantity projected by Army HQ and those negotiated with Ministry

(Qty in MT)

Item	**2013-14**			**2014-15**		
	Projected by AHQ	**Qty finally approved by the Ministry**	**Percentage variation**	**Projected by AHQ**	**Qty finally approved by the Ministry**	**Percentage variation**
	A	B	C	D	E	F
Atta/Wheat	124988	118000	-6	123000	120500	-2
Rice	121000	118000	-2	120000	120000	0
Sugar	37600	35000	-7	39000	35000	-10
Dal	37500	35000	-7	37000	35700	-4
Edible Oil	34300	32000	-7	34000	32700	-4
Tea	3500	3350	-4	3400	3400	0
Malted Milk Food	4000	3200	-20	4400	3400	-23
Tinned Jam	1050	1050	0	1100	1100	0

The persistent inaccuracies in the provisioning of dry ration gets substantiated by the fact that the total quantity of Edible oil, Tinned Jam, Dal and MM Food eventually procured by the Army through central and local purchase in 2013-14 exceeded the quantity sanctioned by Ministry Similarly, in 2014-15 total procurement of sugar and Dal exceeded the sanctioned quantity by 40 *per cent* and 23 *per cent* respectively. by 18 *per cent,*7 *per cent,*6 *per cent* and 4 *per cent* respectively. Over procurement of items in comparison to sanctioned quantities indicates that deficiencies still exist in realistic estimation of annual requirement of ration.

2.2.5.2 Procurement of dry ration

In para 2.2 of the PA Report, it was observed that the procurement of dry ration was not made as per the quantity approved by the Ministry. While over procurement had been noticed in respect of Sugar and Jam, there were shortfalls in the procurement of Dal and Tea, due to failure of large number of contracts, which was eventually made up through local purchase at higher rates resulting in extra expenditure. Based on the recommendation of the PAC, Ministry accepted to revise the terms and conditions of APO contract to make it more stringent for non-performing contracts including risk purchase clause in the contracts to cover local purchase by depots. During the follow up audit the following position emerged in relation to this recommendation:

A Revision of Procurement Procedure

Based on the recommendations of the PAC, the Ministry in June 2014, approved alignment of Request for Proposals (RFP) with the provisions of Defence Procurement Manual (DPM) 2009 incorporating penalty clauses like forfeiture of Performance Bank Guarantee (PBG), Liquidated Damages (LD), General Damages (GD) and Risk Purchase (RP) clause. APO, in their Action Taken Note to the recommendations of the PAC, had confirmed that procurement of Tea and Dal had improved due to the institution of stringent and punitive measures in procurement process.

We, however, noticed in the follow-up audit that except for Sugar, none of the dry items were procured as per the revised RFP format given in DPM, which suggested two bid tender process for APO's procurements. The reason given by the Ministry for non-procurement of other items as per the revised RFP was non-availability of duly approved qualitative requirement by the competent authority. This justification was however not factually correct as the specifications of the ration items had already been well laid down by the Army Headquarters.

B Shortfall in Central Purchase

Out of the selected eight items, only six items *viz*, Sugar, Dal, Edible oil, MM Food, Tinned Jam and Tea, are procured centrally by Army Purchase Organization (APO). It was observed that APO had not procured the indented quantity of ration during the period of audit. During 2013-14, contracts for the indented quantities could not be concluded in any of the six[8] selected items. We found that even the supplies for the contracted quantities were not fully executed in two out of six items. As a result over all shortfalls in procurement against the indented quantities was between eight *per cent* and 71 *per cent*. Similarly, in 2014-15, contracts for indented quantities were concluded only in case of two items. The overall deficiency in actual procurement against the indented quantities for 2014-15 was upto 66 *per cent in* four[9] out of six items procured. The state of quantities indented and actually procured by APO is shown in the **Table-15** below:

Table-15 : Quantities indented and quantities actually procured

(Qty in MT)

Item	Qty sanctioned	Indent placed	Quantities contracted	Quantities received	Percentage shortfall
2013-14					
Sugar	35000	35000	10000	10000	71
Dal	35000	35000	21100	19167	45

[8] Sugar, Dal, Edible Oil, MMFood, Tinned Jam, Tea.
[9] Sugar, Dal, Edible Oil, Tea.

Item	Qty sanctioned	Indent placed	Quantities contracted	Quantities received	Percentage shortfall
Edible Oil	32000	32000	22600	22600	29
Tea	3350	3350	2960	2718	19
MM Food	3200	3200	2950	2950	08
Jam Td	1050	1050	860	860	18
2014-15					
Sugar	35000	28000	20860	20860	40
Dal	35700	35700	15235	11990	66
Edible Oil	32700	32700	22040	22040	33
Tea	3400	3340	2910	2739	19
MM Food	3400	3400	3400	3400	nil
Jam TD	1100	1100	1100	1100	nil

APO stated that shortfall in procurement of Sugar in 2013-14 was due to absence of procurement policy post de-regulation of sugar by Government of India in May 2013. This was further followed by the delay in formulation of sugar procurement policy, which led to shortfall in 2014-15. Shortfall in procurement of Dal, Edible Oil and Tea were attributed to non-performance of contractors or non-acceptance of tenders due to higher rates quoted by Federations/firms which resulted in repeated retendering.

C Non recovery of additional expenditure of ₹1.73 crore

On the basis of the Audit recommendations, the Ministry had stated that new measures had been instituted wherein quantities purchased locally by Supply Depots against non-performance of central procurement contracts, were being intimated to APO regularly for affecting the recoveries of excess expenditure incurred under the Risk Purchase Clauses in APO contracts. We observed that while the shortages in central procurement of Dal, and Tea caused due to default of the contractors were made up through procurement at local level by the Supply Depots, yet recovery for extra expenditure caused was not being made from the defaulting contractor. This resulted in an additional expenditure of ₹1.73 crore, despite the commitment given by the Ministry to PAC.

Despite acceptance of these recommendations, DGST stated that no information was given to APO about quantities procured locally in Supply Depots and the present procurement procedure does not allow the recovery of extra expenditure caused due to local purchases due to failure of contracts from the defaulting contractors. Hence, not only did the Ministry fail to adhere to the commitment made to PAC, but the inaction also precluded the possibility of recovery of ₹ 1.73 crore from the defaulting firms.

D Procurement of branded Atta

Para 2.2 of the PA Report pointed out that the then existing practice of procurement, transportation and grinding of wheat into Atta at the flour mills by Army was uneconomical as compared to the branded Atta available in the market. Therefore, the PAC had recommended procurement of wholesome, unadulterated whole wheat Atta at competitive prices well in time. In this regard, Audit observed that the required quantity of branded Atta in selected Commands was procured at the level of Command HQ based on the sanction issued by the Ministry (October 2009). In this aspect the recommendation of Audit was complied with.

2.2.5.3 Testing of food samples by Defence Food Laboratories

Under para 2.3 of the PA Report, comment was made on the grant of extension of Estimated Storage Life (ESL) to almost all the samples of ration sent to Composite Food Laboratories (CFL) for extension of life. In some cases extension was granted even up to 28 months after expiry of the ESL. In this regard the PAC recommendation about revision of the existing provisions of Army Service Corps (ASC) Technical Instructions and restriction of extension of ESL up to a maximum period of three months was accepted by the Ministry. It was also agreed to appoint qualified scientific/medical advisor to check the quality control and induction of the latest technology for testing of ration samples in the Defence Food Laboratories. On these issues during the follow-up audit the following were noticed:

A Non revision of ASC Technical Instruction

We observed that while the instructions were issued for extension of ESL for food products based on the existing Technical Instruction in June 2013, yet amendment to the provisions of ASC Technical Instruction has not been finalized as of June 2015.

B Extension of Estimated Storage Life (ESL) of ration

During the follow-up audit it was noticed that while the number of samples sent to CFLs/ Food Inspection Unit (FIU) had substantially reduced from 4026 in 2007-08 to 1181 in 2014-15 yet the CFLs had granted extension to almost all the samples sent to it by the depots. Out of 2751 samples of ration sent to the three CFLs and one FIU for extension of ESL during 2013-14 and 2014-15, extension was granted to 2729 samples i.e. more than 99 *per cent*, which included extension beyond three months in 176 cases. We observed that CFL Delhi adhered to the policy and did not grant extension beyond three months of the expiry of prescribed ESL. CFL Jammu however granted extension beyond three months in 157 cases. However, CFL Mumbai and FIU Bengdubi extended the ESL of sugar beyond three months of the prescribed ESL in 19 cases.

In reply to audit query CFL Mumbai agreed and stated that the total extension for sugar was granted for a period of 11 months. Thus, the recommendation of PAC had not been fully complied with and the troops were being issued ration after the expiry of prescribed ESL.

C Induction of latest technology for testing of food

Ministry accepted the PAC recommendations to use latest state of art technology for testing of food items. We however observed that though the funds to the extent of ₹2.81 crore were allotted to DGST in September 2013 for procurement of the latest equipment for testing of food samples, yet the same was not utilised. In August 2014, again funds of ₹3.15 crore was allotted for this purpose but the same was surrendered in March 2015 due to delay in according of approval by CFA for procurement of equipment. Thus, modernization of Defence Food Laboratories as recommended by the PAC could not be undertaken.

2.2.5.4 Non creation of two CFLs.

In response to the observation made by PAC that three CFL's were inadequate when compared with large size and vast geographical size of the Army, Ministry agreed to recommend establishment of one new CFL at Chandigarh and upgrade existing FIU at Guwahati to CFL for approval of Ministry of Finance. We found that Army had initiated process for raising of two CFL's through accretions but the sanction of Ministry was still awaited.

2.2.5.5 Procurement of fresh ration

In para 3.2 of the PA Report, Audit made the observation that, the process of procurement of fresh ration was non-competitive despite large number of registered vendors. Vendors were registered for fresh items as a whole and not for specific items in which they were dealing within their normal course of profession. On this issue, the Ministry on the basis of PAC recommendation had accepted to review ASC procedure for conclusion of contracts to foster competition, expand the vendor base and participation of reputed vendors in the process of tendering. During the follow-up audit the following were noticed on these issues:

A Review of procurement procedure for fresh items

The existing ASC procedure for conclusion of contracts entered in 2006 had not been reviewed despite assurance given by the Ministry. As a result, process of procurement of fresh ration was still non-competitive. Audit examined a sample of 383 contracts for fresh ration concluded in Northern, Southern and Western Commands and it was observed that in approximately 66 *per cent* of the cases, procurements were made only on one or two quotations. Procurement with limited competition was carried out despite the fact that number of vendors registered for fresh items during the period ranged from 94 to141.

B Non-expansion of vendor base

We observed that there was no expansion in vendor base during the period under review. On the contrary, total number of vendors registered under all categories in Northern, Western and Southern Command had reduced from 141, 98 and 132 in 2013-14 to 129, 89 and 125 in 2014-15 respectively. Further, it was noticed that the vendors continued to be registered for all items despite the recommendation of PAC and its acceptance by the Ministry for registration of specific items.

C Unreasonably low rates of fresh ration

As per para 3.3 and 3.4 of the Audit Report it was pointed out that Reasonable Rates (RR), determined by a panel of officers before opening of tenders and Accepted Rates (AR) of fresh ration were much below the Average Local Market Rates (ALMR). Wide variation in contract rates within the same geographical area was also pointed out. In this regard, the PAC had recommended modification of procurement procedure urgently to rectify the anomalies within a definite time, which was accepted by the Ministry (March 2013). The revision of procedure is however still under process (June 2015).

As a fall out of the delay in revision of Procedures, the following position was noticed in the follow-up audit:

- **Anomaly between Market Rates and Reasonable Rates**

At selected stations in Southern Command it was observed that RR and AR of fresh items was up to 41 *per cent* below the ALMR in 2013-14. However, in 2014-15, the RR and AR were found to be higher than the ALMR by 46 *per cent* and 41 *per cent* respectively.

Further AR of fruit fresh at various stations in Western Command and Northern Command was between 15 *per cent* and 48 *per cent* below the ALMR in 2013-14.

- **Variation in contracted rates in the same and adjacent Stations**

Wide variation of contracted rates at the same or adjacent stations was again noticed in the contracts concluded at the adjacent stations in Southern, Northern, Western and Eastern Command during 2013-14 and 2014-15. Findings on continued variation in the rates are discussed as follows;

Southern Command

Pune, Lohegaon, Khadakwasla and Kirkee are adjacent stations. Rates of vegetables, fruits, and meat dressed at Khadakwasla in 2013-14 were found to be higher than the rates of same items at Kirkee by 8 *per ce*nt, 38 *per cent*, and

19 *per cent* respectively. Rates of fruit at Pune/Lohegaon, Khadakwasla and Kirkee in 2014-15 were 36 *per cent,* 42 *per cen*t and 61 *per cent* higher than the rates of previous year.

Northern Command

The rate of vegetables at Akhnoor in 2013-14 was higher than the rates at Nagrota by 29 *per cent*. Rate of fruit fresh during 2013-14 at B D Bari and Akhnoor was 24 *per cent* and 13 *per cent* higher than the rate at Nagrota. Rate of fruit fresh at Nagrota in 2014-15 was 23 *per cent* higher than the accepted rate of previous year.

Western Command

Rates of vegetables fresh in 2014-15 at Patiala, Chandimandir and Ludhiana were 13-28 *percent* higher than the rates of previous year and the rates of fruit fresh in the same year at Ambala, Patiala, Chandimandir and Ludhiana were 20-28 *per cent* higher than the rates accepted in 2013-14

Thus, the anomalies in ALMR, RR and AR and variation in contracted rates within the same geographical area persisted despite assurance given (March 2014) by the Ministry.

2.2.5.6 Distribution of ration

As per para 4.1 of the Audit Report, consuming units did not receive different varieties of fruits and vegetables according to the prescribed mix. Analysis showed that 74 *per cent* of fruits and vegetables issued during the month were not according to the prescribed proportion. To overcome the variation between the fresh rations issued by all the Supply Depots and received by units, the PAC recommended developing an efficient and effective computerized system connecting all the Supply Depots and supply points to bring issues, receipts, inventory management, procurement and other aspects of supply chain management under this system to avoid discrepancies. The recommendation was accepted by the Ministry in March 2013. Results of the follow-up audit on this point are discussed below.

A Computerization of Army Service Corps (ASC) Depot

In October 2009, software development was undertaken as a pilot project in DGST to connect all the Supply Depots and supply points with Corps /Commands Headquarters and ST Directorate for sharing of data. The contract was awarded to M/s Prithvi Info Solutions Ltd for ₹ 82.24 lakh in October 2009, to be completed in four stages by June 2011. After completion of the first two stages and payment of ₹27.61 lakh , contract was proposed for closure in June 2015 due to slow progress of the work, DGST stated that a case for development of Enterprise Wide Application for all ASC functions had been taken up and was likely to be made functional by 2020. Thus, the recommendation of the PAC has not been complied with.

B Non-issue of fruits and vegetables in the prescribed proportion

During the field audit of selected consuming units and scrutiny of documents related to receipt and consumption of fruits and vegetables fresh, we observed that the consuming units did not receive the fruits and vegetables according to the prescribed mix. Wide variation in the receipt of vegetables and fruits in the prescribed proportion was noticed in Western and Eastern Command, whereas, the variation in Northern Command was marginal. Comparative analysis of the issues and receipt of vegetables and fruits at 15 units in the Northern, Western and Eastern Commands showed that in the case of vegetables and fruits, about 82 *per cent* and 92 *per cent* of the issues made during the month respectively were not in accordance with the prescribed percentage variety.

As per the data maintained by the consuming units, we found that out of total 423 types of vegetables authorized, 74 types were issued as per the prescribed proportion, whereas, 183 types were issued less and 166 types were issued in excess of the prescribed proportion. In the case of fruits only 17 types out of 202 types of fruits authorized were issued as per the prescribed proportion, wherein, 98 types were issued less and 87 types were issued in excess of the prescribed proportion. We enquired for the reasons for non-issue of fruits and vegetables in the prescribed proportion from the concerned Supply Depots. In reply the Supply Depots stated that main reason for the same was due to non-availability of certain items in local market and projection of demand by user units as per choice of troops.

2.2.5.7 Quality of ration found inadequate by Army's own feedback reporting system

Para 4.4 of the Audit Report had pointed out very low level of troops satisfaction regarding quantity, quality and taste of rations including low quality of meat and fresh vegetable. It was also pointed out that 68 *per cent* of the feedback reports received from the consuming units were graded as satisfactory and below. The PAC recommended validation of the quality of ration through an independent agency, revision of the existing food specifications with a provision to review the same every three years. In this regard during the follow-up audit the following status was noticed.

A Study by Defence Institute of Physiology and Applied Science (DIPAS)

Sanction was accorded by the Ministry in August 2013 for a study through DIPAS to determine the satisfaction level of troops as well as to suggest alteration in ration depending upon the nutritional requirement, development of food technology and preference of troops. The findings of the study were required to be submitted within one year from the date of issue of the sanction but Audit observed that DIPAS was still analysing the data collected from 53,497 troops (August 2015).

Further, Audit examined the feedback reports generated by 39 units in the Northern, Western and Eastern Commands, wherein the troops had evaluated the quality of various items of ration under seven categories. The quality of ration was graded as good or below in respect of 60 *per cent* and 73 per cent of the feedback reports pertaining to Eastern and Northern Command respectively, whereas in Western Command, quality of ration to the extent of 84 *per cent* was graded as excellent.

B Revision of Food Specifications

In response to the recommendation of the PAC, the Ministry had stated that Technical Standardization Committee (TSC) meets annually for review and revision of the Defence Food Specification. During the follow-up audit, however, it was noticed that TSC met after 30 months in April 2015, during which five new specifications were formulated. AHQ stated (September 2015) that no guidelines were received from the Ministry to conduct TSC meeting annually. Thus, the recommendation of the PAC to revise the existing food specification with a provision to review same every three years has not been complied with.

C Availability of data on exclusive Website of Army

The PAC had recommended posting of contracted prices of procurement of dry and fresh items of ration, list of vendors, data regarding price variation rates at different locations and last purchase price of fresh ration on an exclusive website of the Army for the concurrent knowledge of different command/authorities, tasked with the responsibility of procurement and provisioning for the troops. In compliance to this recommendation, we observed that data regarding list of vendors, rates *viz.* expired contract rate (ECR) and current contract rate (CCR) at different locations, last purchased price *etc.* were being displayed on Army website.

2.2.6 Conclusion

The follow-up audit on supply chain management of ration was conducted with the aim to verify the compliance of the Ministry and Army HQ to the accepted recommendation of PAC, which were made on the basis of Comptroller & Auditor General of India's Report No 6 of 2010-11and adopted by PAC in March, 2013.We observed that against the 12 recommendations, which were directly related to the activities of Supply chain management of ration, the action had been taken only on two recommendations, which were fully implemented**.** In case of the remaining ten recommendations, implementation was partly done.

As a result of delay in compliance to accepted recommendations, Army continues to procure items of dry ration, except sugar, without following the procurement process as envisaged in DPM. Full requirement of ration as indented by the Army HQ, was not being met by the APO, which resulted in local purchase by the Supply Depots at higher rates. Recovery of the extra expenditure caused due to local purchase at higher rates could not be invoked from the defaulting firms by the Ministry despite the assurance given to the PAC. Army continues to consume ration, even after the expiry of original shelf life. Modernisation of the food testing laboratories by introducing latest state of the art technology could not fructify despite availability of funds.

As far as procurement of items of fresh ration is concerned, the DGS&T could neither expand the vendor base nor improve the process of registration of specific vendors for specific group of items. As a result, the procurement of fresh ration was not adequately competitive. The lack of competition was visible as abnormal variations in the local market rate and the rates accepted by the Army persisted.

2.3 Procurement of Environmental Control Units found incompatible during exploitation

Despite persistent overheating of the engine, the user trial team recommended the procurement of Environmental Control Units (ECU) for fitment in Infantry Combat Vehicles. Accordingly, 2,077 ECUs worth ₹219.48 crore were procured in 2009 and 2010. The fitment of ECUs could not however be carried out due to overheating of ICV engines and reduction of its efficiency. The ECUs are therefore lying without any effective use.

Infantry Combat Vehicle-BMP-2/2K (ICV) is the main Combat vehicle held by the Mechanised Infantry Battalions of the Indian Army. The vehicle was equipped with missile carriage and firing capability and features like computerised fire control system and thermal imaging night sight. These components/ sub-systems are highly sensitive and degrade under extreme heat and dust conditions. For efficient functioning of the electronic system and to reduce fatigue of the crew/troops, a need was felt to provide Environmental Control Units (ECU) on these vehicles.

The scheme to provide 969 ECUs was approved by Defence Procurement Board (DPB) in January 2006. Ministry of Defence (MoD) issued request for proposal (RFP) to 15 vendors in March 2007 seeking techno-commercial proposal. The RFP, *inter alia*, included a provision stipulated in the General Staff Qualitative Requirement (GSQR) of ECU that it should be able to operate continuously for six hours without affecting its efficiency. Four vendors participated in the user trials which were held in August 2007, but none of the vendor met the GSQR requirement about requisite cooling. In subsequent user trials held in April/May 2008, only two vendors participated. While the equipment of M/s Sidwal Refrigeration Limited did not meet the GSQR parameters, the equipment of M/s Fedders Lloyd Corporation was selected. The trial of the equipment was carried out on ICV for 30 km run in April 2008 but engine temperature increased to 110°C after 10 Kms of running, against the permissible oil and water temperature level of 80°C and 100°C. Thus due to overheating of the engine, the trials were not successful. Repeat trials were carried out, but the problem persisted. The dynamic trials were yet again carried out (May 2008) but the results showed that the oil and water temperature had again gone up to 105°C and 107°C respectively. Notwithstanding these findings, the equipment was recommended by the User trial team (June 2008) for induction stating that the increase in temperature was within limits.

Based on the recommendations of the trial team, the procurement of 969 ECUs was approved by the Ministry and a contract concluded in September

2009 with M/s Fedders Lloyd at a cost of ₹110.66 crore. The ECUs were supplied by the firm between April 2010 and August 2010.

To meet the additional requirement of the Army, another contract for procurement of 1,108 ECU was concluded for ₹124.93 crore in October 2010 with the same firm under option clause/ repeat order. The delivery of the equipment was completed between March 2011 and November 2011 and a total payment of ₹219.48 crore was made to the firm for the supplies made against the two contracts. Balance payment of ₹16.11 crore was to be made on successful installation/commissioning of ECU.

As per the fitment schedule drawn by Director General Mechanised Forces (DGMF), 1,494 ECUs were to be fitted in the ICVs between March 2011 and May 2012 and remaining 583 ECUs were to be fitted between July 2012 and December 2012. We observed that installation of ECUs in ICVs was put on hold in April 2012 by DGMF due to technical flaws resulting in overheating of ICV engine and reduction in efficiency, after 30-40 minutes of its usage. To solve these problems, certain modifications like improved PTO shaft, *etc* were incorporated yet the problem of engine overheating persisted, for which no conclusive reasons/solution were found. As a result, the fitment of ECUs is awaited (November 2015).

Hence it is evident that despite the problem of engine overheating right from the user trials carried out in April 2008, 2077 ECUs were procured at a cost of ₹219.48 crore, which were lying without any effective use.

The case was referred to the Ministry in January 2016; their reply was awaited (March 2016).

2.4 Non-deduction of income tax on field allowances granted to Junior Commissioned Officers in the Army

Pay and Accounts Officers (Other Ranks) as Drawing and Disbursing Officers did not recover income tax on field allowances, in excess of the exemption limit, paid to Junior Commissioned Officers in the Army. The amount of such tax worked out to ₹5.05 crore for the period from 2008-09 to 2012-13.

Pay and Accounts Officers (PAO) (Other Ranks) (ORs) are the Drawing and Disbursing Officer (DDO) for the purpose of deducting income tax at source in respect of Personnel Below Officers Ranks (PBORs). PAOs are the officers from the Office of Controller General of Defence Accounts (CGDA), under Ministry of Defence.

As per section 192(1) of Income Tax Act, 1962 any person responsible for paying any income chargeable under the head ‘salaries’ shall, at the time of payment, deduct income tax on the estimated income of the employee under the head ‘salaries’ for the financial year. The tax deduction at ‘source’ (TDS) is to be made at the average of income-tax. Certain allowances of pay given by the employer are however exempt up to a fixed limit under Section 10(14) of Income Tax (IT) Act. This includes certain field allowances[10] being paid to the Army personnel.

Consequent to revision of rate of field allowances in respect of Junior Commissioned Officers (JCO) in September 2008 and January 2011, the field allowances payable to the JCOs became higher than the exemption limit specified in the IT Act. Audit scrutiny of the data in the computerized pay accounting system related to pay and allowances of the JCOs at 30 out of 40 PAOs revealed that notwithstanding the fact that exemption prescribed was up to a fixed limit, the PAOs had computed the exemption on entire amount of the field allowances, for the period from September 2008 to March 2013. Therefore, income tax on amount of field allowances, exceeding the exemption limit, was not charged by the PAOs. This resulted in non-recovery of ₹5.05 crore.

In reply to the audit query, the PAOs accepted the fact that income tax was not being deducted on the field allowances by the system. CGDA, in February 2014, also stated that the software program has been modified to include the amount of field allowances, more than the specified exemption limits for calculation of income tax from the financial year 2013-14 (Assessment Year 2014-15). The reply was however silent about the recovery of income tax for the period from 2008 to 2013.

Thus, the failure of DDOs in deduction of income tax from JCOs, on field allowances, in excess of the laid down exemption limit, resulted in non-recovery of ₹5.05 crore for the period from 2008-09 to 2012-13.

The case was referred to the Ministry in October 2015; their reply was awaited (March 2016).

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[10] Compensatory Field Area Allowance(CFAA), Compensatory Modified Field Area Allowance(CMFAA), Compensatory Highly Active Field Area Allowance(CHAFAA), High Altitude Uncongenial Climate Lower (HAUCL), High Altitude Uncongenial Climate Higher(HAUCH) and Special Compensatory Counter Insurgency Allowance(SCCIA)

2.5 Short acquisition of land measuring 73.826 acres

The failure of the Defence Estate Officer, Jorhat and the Board of Officers in following the laid down procedures regarding identification of land on ground, before acquisition, resulted in short acquisition of 73.826 acres of private land valuing ₹ 2.26 crore.

In view of the new raisings of a Mountain Brigade in the Eastern Theatre, a need for acquisition of suitable land at Daporijo, Upper Subansiri District, Arunachal Pradesh was felt to accommodate the formation.

The procedure for acquisition of immovable property laid down in the Cantonment Laws stipulates that after a piece of land is selected for acquisition a site plan thereof will be sent by the user to the Defence Estate Officer (DEO). The DEO would collect and furnish concerned Board of Officers (BoO) the following information;

(a) The extract of the Revenue/Khasra plan with land proposed to be acquired duly marked on it in distinct colour, clearly showing the boundary of each village involved in the proposal.

(b) Details of Khasra number of the land selected for acquisition together with the respective area of each Khasra Number.

(c) "No-objection" of the concerned State Government to the acquisition of land.

The DEO and BoO is also required to inspect the land jointly with the local revenue staff to identify accuracy of the land under acquisition before submitting the proposal for obtaining Government sanction.

BoO convened in January 2010 for identification of suitable land for the Mountain Brigade, recommended (February 2010), the acquisition of 358.415 acres of private land in General area of Daporjio. Based on these recommendations, a case was taken for accord of sanction. Ministry accorded sanction in March 2010, for acquisition of 358.415 acres of private land at an estimated cost of ₹1.76 crore. The area of land to be acquired was however subsequently (December 2012) revised to 157.50 acres at an estimated cost of ₹4.82 crore at the rates of ₹ 3 lakh per acre plus two *per cent* contingency under the sanction of the Ministry.

For acquisition and taking over of the subject land, DEO Jorhat made a payment of ₹4.82 crore in December 2013 to the Deputy Commissioner (DC) Daporijo. During joint verification of the land by the DEO, DC Daporijo and Army Authority (AA) in December 2013 and in January 2014, it was however found that the total area of actual land was 83.674 acres only instead of 157.50 acres for which complete payment had been made. To reassess the area, a resurvey, by the team comprising of representatives of DC, DEO and AA was carried out in January 2014, but the actual area of land was found as 83.674 acre only. Hence there was a shortfall of 73.826 acres of acquired land valuing ₹ 2.26 crore. We observed that despite being aware of the inaccuracy in the measurement and quantification of the land, the DC disbursed the payment to the land owners in January 2014. Finally, the area of available land at Daporijo measuring 83.674 acres out of 157.50 acres was taken over in February 2015 by the DEO/Army Authority.

To an audit query (August 2015) about inaccuracy in assessment of the land being acquired, DEO Jorhat stated that Arunachal Pradesh was a non-cadastral area having no established system of land records and Khasra maps were not available for the whole state. Therefore, the BoO could not verify the details of land in question before acquisition.

The reply given by the DEO was however not justified as the absence of established land record system and non-availability of Khasra map in itself made it all more the important for the DEO and BoO to identify the physical availability of land ground, during the joint inspection with local revenue authorities before acquisition of the land. Hence the absence of land records cannot be a justification for sanction and payment for the land which did not exist on the ground.

The case therefore revealed that the failure on the part of DEO and BoO in verifying the quantum of land available on ground had resulted into short acquisition of 73.826 acres of land valuing ₹2.26 crore. The overpaid amount needs to be recovered or alternate land worth the excess amount paid be acquired by Army.

The case was referred to the Ministry in January 2016; their reply was awaited (March 2016).

CHAPTER III : ARMY

3.1 Unwarranted procurement of Radio Sets for trial purposes

Army HQ procured 322 radio sets valuing ₹21.90 crore in excess of the requirement for field trials in 2006. These sets procured for Armoured Fighting Vehicles were not used for the trials and require an up gradation to make them compatible with the Star V Mark II specification, which entails an extra expenditure of ₹11.27 crore.

Composite Net Radio (CNR) Sets (Radio Sets) are used for voice and data communication in Armoured Fighting Vehicles (AFVs). Based on the sanction accorded by Ministry of Defence (MoD) in May 1992, for an amount ₹ 1.73 crore, Defence Electronics Applications Laboratory (DEAL), Dehradun and M/s Bharat Electronics Limited, Panchkula (BEL) had jointly undertaken the development of CNR sets for Military operations. The scope of the project was to fabricate and evaluate 5W/50W frequency hopping radios in VHF band. DEAL developed the radio sets at a cost of ₹ 3.41 crore and the project was closed in March 2002, though it did not fully meet the user requirement. These sets developed by DRDO therefore, remained under series of trials between 1999 and 2003 but could not be cleared.

Against the requirement of 15,572 radio sets, DPB had recommended procurement of 7,786 radio sets from DRDO in October, 2001. It was also recommended that initially an order be placed on BEL for 2000 radio sets, to be supplied within a period not exceeding nine months. Given the fact that the trials had not been fully completed even after successful completion of the project, it was decided by the Army HQ, in November 2003, that initially 500 sets be procured for extensive field trials, and the remaining 1500 sets be procured only after the equipment was declared successful in trials.

Defence Procurement Procedure (DPP) prescribes that vendor shall be asked to provide the desired number of units of equipment for field trials. We however observed that in March 2005, Army purchased 500 radio sets for the trial purposes, which was 25 *percent* of the total requirement (2000 sets). There were no documented reasons available in the records, which justified the necessity for procurement of 500 radio sets, worth ₹ 34 crore, for trial purposes. Given the procurement of an unduly higher number of radio sets for trials, audit examined the actual usage of these sets and observed that out of the total number of 500 sets of VHF 5W/50w procured at a total cost of ₹34 crore, only178 numbers of the radio sets were issued for trials purposes. As per the records maintained by the holding depot i.e. Central Ordnance Depot (COD) Agra the balance quantity of 322 numbers valuing ₹21.90 crore was not issued at all and were held at their stock.

We further observed that by the time the trials were successfully completed in 2008, the radio sets had undergone up gradation and BEL had produced the radio sets of Star V Mark II version. It was therefore decided by Army HQ that all the radio sets to be inducted should be of Mark II version and those held in the stock be also upgraded, to be made compatible to Star V Mark II specifications.

Accordingly, the Army procured the balance 1500 numbers of radio sets of Mark-II version from BEL in February 2010. The cost of procurement of Mark-II version in 2010 was same as that of Mark-I version in 2005.

In order to upgrade the 500 radio sets previously supplied in June 2006, BEL in April 2014, intimated to DGMF that for making these sets compatible with Star V MK-II specifications, almost 80 *per cent* of the Printed Circuit Boards (PCB)/Hardware needs to be replaced and major modification needed to be carried out. For this, BEL made a budgetary quotation for retro modification at ₹3.50 lakh per unit (April 2014). While the decision on retro modification of 500 radio sets was still under consideration, these sets were lying unutilized in COD Agra awaiting their further use (March 2015).

The case therefore reveals that, the procurement of 500 radio sets for field trials were in excess of the desirable requirement, as only 178 sets were actually utilised for trials. The excess number of 322 radio sets valuing ₹21.90 crore which were held in stock without any use since their procurement in June 2006, would also need retro modification entailing an expenditure of ₹11.27 crore. This amount was avoidable, had the number of radio sets for field trial been procured rationally on the basis of actual need.

The case was referred to the Ministry in November 2015; their reply was awaited (March 2016).

3.2 Irregular attachment of service personnel with private institute

While Army College of Medical Sciences was in the process of establishing its own teaching facilities, Ministry sanctioned the use of part faculty from Government run hospitals, for a period of five years. Army Headquarters however attached service personnel for clerical jobs from various Corps/units, which were not covered under the Ministry's sanction.

Army College of Medical Sciences (ACMS) New Delhi is a professional institute, running under Army Welfare Education Society (AWES)[11], for the

[11]An organization established under Societies Registration Act XXI of 1860 under Adjutant General's Branch at Army Headquarters.

wards of serving and retired personnel of Indian Army. The college was opened in 2008 for its first batch of MBBS students.

To facilitate establishment of the College and to provide support with regard to faculty, it was decided by the Ministry with the approval of Raksha Mantri in February 2008, to permit use of part faculty of Armed Forces Medical Services (AFMS) and the facilities of Base Hospital and Army Hospital (R&R), Delhi Cantt subject to the following conditions:

a) The services of Major General and faculty of AFMS would be used for least possible time not exceeding five years from the start of the college.

b) The AWES should take action to recruit its own faculties within the five years.

c) The facilities of the Base and R&R Hospitals would be used for a period not exceeding five years.

We however noticed (July 2015) during the audit of Base Hospital, Delhi Cantt (BHDC) that Adjutant General's (AG) Branch, Integrated Headquarters (IHQ) of Ministry of Defence (Army) had issued sanctions for attachment of Personnel Below Officers Ranks (PBORs) with the ACMS during 2010-11 to 2014-15. These PBORs ranging from 38 to 61 per year were attached with ACMS from different Corps/Units of Army for the clerical, store keeping, housekeeping jobs etc.

During the five years period (2010-2015), the total number of such personnel attached with the ACMS aggregated to 276. Since the college is not a bona-fide Government institution, the attachment of these service personnel, who were on the regular pay rolls of the Army, was not in order.

In reply to the audit query about the irregular attachment of PBORs, BHDC stated (November 2015) that the attachment was done on the basis of permission accorded by the Ministry in February 2008, for use of part faculty of AFMS and facilities of Base Hospital, Delhi Cantt for ACMS.

The reply furnished was not factually correct as the sanction accorded by the Ministry was for use of faculty for training of the students of ACMS and not for attachment of PBORs for clerical, store keeping and housekeeping duties etc.

Further, Army HQ (AG's Branch) replied in May 2016 that the Ophthalmology Department of BHDC was shifted temporarily to the Academic Block of the ACMS in the year 2014 and the attachment of manpower at BHDC was put to use as the Department had to function independently away from the hospital. It was also added that the combatants so attached to ACMS also performed their professional duties at BHDC afterwards.

The reply by Army HQ was not justified as the shifting of Ophthalmology Department of BHDC was done in 2014, that too on temporary basis, whereas the practice of attachment of PBORs from different Corps/Units of Army with ACMS continued from 2010-11. Further the practice of performing duties both at BHDC and ACMS was not appropriate.

Hence, the attachment of 276 PBORs for other than bona fide government duties to ACMS was unauthorised. Army HQ may therefore take corrective measures and ensure that the service personnel are not attached to private institutes.

The case was referred to the Ministry in January 2016; their reply was awaited (March 2016).

3.3 Irregular sanction of an additional laundry facility

General Officer Commanding, Maharashtra, Gujarat and Goa Area accorded 'Go-ahead' sanction on 'urgent operational' grounds for additional laundry facility of 300 Kg capacity at a cost of ₹1.21 crore. The additional requirement was created by enhancing the 'norm' and the work sanctioned by evading reference for approval of the competent financial authority.

Defence Works Procedure (DWP), 2007 stipulates that if additions become necessary to the already sanctioned works due to revision of scales or establishments or for other specific administrative reason, a supplementary estimate will be prepared and revised administrative approval obtained from the competent financial authority to the entire work, including both original and supplementary estimates.

Ministry of Defence (Ministry) accorded a sanction in October 2008 for construction of new Command Hospital, Southern Command (Command Hospital) at a cost of ₹270.77 crore, which included provision of mechanical laundry of 400 Kg capacity costing ₹1.54 crore. To cater for the requirement of additional items of works projected by the users, which were not initially in the original sanction, the Administrative Approval was revised to ₹382.37 crore in December 2012.

To execute the work, Chief Engineer Pune Zone (CEPZ) concluded (January 2013) a contract with M/s Omaxe Infrastructure and Constructions for an amount of ₹338.79 crore, which included supply and installation of mechanical laundry of 400Kg at a cost of ₹3.72 crore. The progress of the work was 27 *per cent* (December 2015) as against the scheduled completion date of August 2015.

Even before the revised administrative approval was accorded (December 2012), Command Hospital initiated a separate proposal in June 2010 for enhancing the capacity of the laundry by increasing the average laundry load from the already sanctioned 3Kg/bed/day to 5Kg/bed/day. The case was, therefore, taken up by Command Hospital for provision for an additional capacity of 300Kg on "urgent operational grounds". This increase in the capacity was however, sought by enhancing the norm. The General Officer Commanding, Maharashtra, Gujarat and Goa Area (GOC) accorded (June 2010) a 'Go-ahead' sanction invoking Para 35 of DWP[12], for enhancing the capacity of laundry services at Command Hospital at an estimated cost of ₹1.21 crore. The work was executed by CEPZ at a cost of ₹1.07 crore (May 2012) i.e, seven months before the contract for hospital building was concluded.

We observed that the sanction accorded by the Ministry in 2008 was based on the recommendations of a Board of Officers (Board) that was presided over by an officer from the Command Hospital. Since no scales for laundry equipment existed, the Board considered the laundry facility of another 600 bedded military hospital at Pune i.e. Military Hospital (MH) Cardiac Thoracic Centre (CTC) as the norm. With 250Kg capacity and eight hours running per day, the load worked out to about 3Kg/bed/day and therefore, a laundry machine of 400Kg/hour capacity for the new 1097 bedded hospital (CHSC), was sanctioned by the Ministry in 2008. Notwithstanding the fact that Ministry had approved the norms of 3Kg/bed/day while according the sanction, GOC in June 2010, revised the load to 5Kg/bed/day and accorded sanction for an additional laundry of 300Kg capacity.

We observed that in the absence of any scales, the norm of 3Kg/bed/day was recommended by the Board and approved by the Ministry based on the load in MH CTC. Audit enquiry also revealed that in other military hospitals *viz* MH Kirkee, Trivandrum, Golconda and Cannanore, '*per bed per day*' load was less than 3Kg. Hence, the sanctioning of additional laundry at a cost of ₹ 1.21 crore, by enhancing the norm from 3Kg to 5Kg/bed/day, by a lower CFA was irregular. Further, the case did not qualify for sanction under para 35 of DWP.

The case was referred to the Ministry in January 2016; their reply was awaited (March 2016).

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[12] Para 35 of DWP is invoked in case of unexpected circumstances arising due to unforeseen operational necessity or urgent medical grounds, which make it imperative to short-circuit normal procedure.

3.4 Recoveries/savings and adjustment in accounts at the instance of Audit

Based on audit observations, the audited entities had recovered overpaid pay and allowances, sundry charges, training charges, cancelled irregular sanctions and amended annual accounts, having a net effect of ₹184.73 crore.

During the course of audit, we observed several instances of irregular payments,under/non-recovery of charges, issue of irregular sanctions and accounting errors. Acting on the audit observations, the audited entities took corrective action, the net effect of which is summarized below:

Recoveries

The check of records of Defence Research and Development Organisation (DRDO), Principal Controllers of Defence Accounts, Military Engineer Services (MES), Defence Institute of Armament Technology, units/formations of the Army, Pay and Accounts Offices, Canteen Stores Department (CSD) Head Office (HO) *etc* revealed instances of irregular payment of pay and allowances, sundry charges, non recovery of training charges, irregular reimbursement of electric charges amounting to ₹35.87 crore **(Annexure-VI)**. On being pointed out, the entities concerned recovered the irregular payments

Savings

Various sanctioning authorities such as the Principal Controller of Defence Accounts, Sub-Area HQ of the Army, DRDL, *etc* cancelled irregular approvals to works, amended Terminal Gratuity Claims and restricted CGEIS claims. Director, Defence Research & Development Laboratory cancelled the supply order. The net result of these actions was a saving of a total of ₹8.36 crore (**Annexure-VII**).

Amendment to Annual Accounts of CSD

When we pointed out instances of irregular accounting such as under provisioning of freight charges, Sundry Creditors, understatement of outstanding liabilities and less provisioning of doubtful debts during the years 2012-13 & 2013-14 and Overstatement of Assets towards Closing Stock and receivables due to outstanding Value Added Tax refund claims for the years 2012-13 & 2013-14, the CSD corrected the annual accounts. But for these corrections, profit would have been inflated to the extent of ₹281 crore. As 50 *per cent* of the profit is distributed amongst the three services and other beneficiaries, the net savings to the Government was ₹140.50 crore **(Annexure-VIII)**.

CHAPTER IV: WORKS AND MILITARY ENGINEER SERVICES

4.1 Inordinate Delay in completion of works sanctioned for operational military requirements

Construction of an underground operation theatre (UGOT), sanctioned for operational military requirements of a Military Hospital (MH), was delayed by Military Engineer Services (MES) by ten years, thereby denying the facility to the troops in operations. The work was completed at a cost of ₹1.54 crore, after the MH had already moved to a different location. The assets are now lying unutilized.

To avoid any eventuality of the existing Military Hospital (MH) becoming non-functional in case of shelling across the border, necessity for construction of underground operation theatre (UGOT) was felt by Military Hospital (MH) at Tangdhar. The MH had proposed that with a surgeon Specialist, Anaesthetist and Medical Specialist posted with the hospital, the UGOT can be used for providing uninterrupted patient care in case of emergency.

General Officer Commanding of the Corps accepted the necessity on urgent military and operational reasons and accorded a 'go ahead sanction' for ₹ 70 lakhs, invoking Para 11[13] of Defence Works Procedure (DWP), in July 1999, for construction of the UGOT. The work was to be completed within two years. Regular administrative approval was accorded by Ministry of Defence in November 2004 for ₹ 1.39 crore.

For execution of the work, a contract was concluded by Chief Engineer Srinagar Zone (CESZ) in September 2000 for a lump sum of ₹ 1.25 crore with dates of completion as 26 September 2002. Despite the operational urgency, MES could not complete the project in time. The construction work was delayed due to a number of problems like seepage from floor and walls leading to flooding of operation theatre, which was attributed by HQ Northern Command to poor workmanship by the contractor and lack of proper supervision by MES.

In April 2008, the MH for which UGOT was being constructed was shifted to a different location (Drugmulla) and a forward surgical centre (FSC) of a Field Hospital was shifted to Tangdhar. With this relocation of hospitals, Tangdhar station was effectively without any dedicated hospital, as the FSC was only a detachment of a field hospital. There were no Surgeon Specialist or Anaesthetist posted in the FSC.

[13]Para 11 of DWP is invoked in case of unexpected circumstances which may arise from operational military necessity and make it imperative to short circuit the normal procedure.

Due to continued seepage in the UGOT, HQ Infantry Division constructed (March 2011) a retaining wall and drain up to the depth of foundation to prevent underground water seepage into the UGOT for ₹15.45 lakh. Construction of UGOT was finally completed in June 2011 at a cost of ₹138.68 lakh and handed over to the users in September 2011.

We noticed that while the provision of UGOT was sanctioned by the GOC of the Corps on urgent military and operational reasons by invoking Para 11 of the DWP, yet MES could not complete the work within the stipulated time. The urgent operational work which was stipulated to be completed within two years, was actually completed after 12 years of the sanction, thereby denying the lifesaving facility to the troops in operations. The unit (MH), which had initiated the case for UGOT, *inter alia,* on the basis of available medical specialists, had already shifted out to a different location by that time. The casualties requiring surgical treatment were either airlifted or evacuated by road to nearby hospitals. The FSC which replaced the MH, had neither a surgeon specialist nor any Anaesthetist posted, therefore, the assets worth ₹1.54 crore so created are lying un-utilized.

The matter was referred to the Ministry in January 2016; their reply was awaited (March 2016).

4.2 Non recovery of water charges from Personnel below Officer Ranks

Garrison Engineers responsible for realization of revenue, did not recover water usage charges from Personnel below Officer Ranks at Udhampur, Satwari and Dimapur stations, despite instructions issued by the Ministry. This resulted in non-recovery of ₹ 97.89 lakh.

Regulations for the Military Engineer Services (RMES) stipulate that Garrison Engineer (GE) is responsible for prompt realization of all revenues receipt. Prior to Oct 2003, all paying consumers paid from Defence Services/civil estimates were to be billed for water consumed by them at all India flat rate fixed by Government of India.

In October 2003, Ministry revised rate of recovery of water usage charges for the paying consumers to the charges of prevailing rates of recovery made by local State Jal Board/ water Supplying agency from general public living in adjoining colonies. However, these charges from service personnel were to be recovered at half of the above stipulated rates.

Notwithstanding the instructions issued by the Ministry, we noticed that in Northern command, water usage charges were not being recovered by MES from PBORs at Udhampur and Satwari stations, though the recovery from officers and civilians was being affected. As a result, water usage charges worth ₹58.81 lakh were outstanding against occupants of 3646 PBOR quarters for the period from 2008-09 and 2013-14. Similar in Eastern command, the irregularity was also observed at Military station Dimapur where water charges were not being recovered. The amount of such recovery for the period from 2008-09 to 2014-15 works out to ₹39.08 lakh.

To an audit query, Assistant Accounts Officer (AAO) GE Udhampur, responsible for raising of bills, stated that non recovery was due to non receipt of return of recoveries from concerned Barrack Stores Officer. GE Satwari confirmed commencement of recovery of water charges from PBORs after same was pointed out in audit. GE Dimapur, however, stated that PBORs were entitled for free supply of water in terms of Quarter Master General, Army HQ (QMG) directions issued on 10.07.2007.

While the GEs at Udhampur and Satwari had accepted the failure in the system, the reply given by GE Dimapur was not factually tenable, as the instructions issued by the Ministry cannot be superseded by the instructions of a lower authority i.e. QMG. Further, even the QMG in March 2012 had clarified that the recovery from service personnel be made as per the MoD policy directives of October 2003.

The case, therefore, reveals that the respective GEs had failed to recover water usage charges from PBORs at Udhampur, Satwari and Dimapur stations, resulting in non recovery of ₹97.89 lakh.

The case was referred to the Ministry in January 2016; their reply was awaited (March 2016).

CHAPTER-V : BORDER ROADS ORGANISATION

5.1 Improper selection of sites for bridges

Selection of sites without carrying out sub soil investigation (SSI) by Headquarters DGBR resulted in subsequent foreclosure of work after the soil strata was found unfit for construction of bridges. The need for SSI was ignored despite specific instruction on the same. Non-compliance resulted in wasteful expenditure of ₹ 2.53 crore.

Indian Road Congress (IRC) lays down the need for verification of geological characteristics of the soil like previous site investigation reports, examination of geological surface, characteristics of the existing geo-materials, sub surface exploration to determine the suitability of soil or rock for foundation of bridge. Technical instruction (TI) no. 3 of Border Road Organization (BRO) also stipulates that for a bridge project site survey and sub soil investigation (SSI) be carried out in a planned manner by HQ DGBR.

We observed in two Border Road Organisation (BRO) projects that selection of site for construction of permanent bridges was done ignoring the requirement of SSI and other aspects mentioned in IRC. Work on construction of two bridges had to be foreclosed after the soil strata was not found appropriate for laying foundation resulted in infructuous expenditure of ₹2.53 crore as discussed below:

Case I

Based on the recommendations of the Board of Officers (BoO) for construction of major permanent bridge with steel superstructure over river 'Irang' on Imphal Barak road, Ministry of Road, Transport and Highways (MoRT&H) in July 2010 accorded Administrative Approval (AA) and financial sanction for ₹4.41 crore. The AA however stipulated that since the SSI report had not been enclosed with the proposal for sanction the same needed to be carried out at the foundation locations followed by confirmatory boring.

Notwithstanding the necessity for SSI, brought out in the TI and stipulated specifically in the AA, execution of the work for the bridge was commenced departmentally in February 2011 without carrying out the SSI. During execution of the work, it was however, found that hard strata did not exist at foundation level and therefore construction of abutment above loose soil was considered unsafe. The safe bearing capacity(SBC) was found much less on both sides of the abutment. HQ DGBR therefore advised Chief Engineer (P) Pushpak in July 2012 to explore a fresh site. The site was therefore given up after incurring an expenditure of ₹ 2crore (March 2013).

On being pointed out by Audit (August 2012) about non carrying out SSI before selection of the site for proposed bridge, the Border Roads Task Force stated (September2012) that after reaching the excavation up to foundation level and seeing the soil strata, it was felt necessary to carry out SSI. The reply was not tenable as not only was the need for SSI specified in the TI issued by DGBR but the AA accorded by MORTH also emphasized on the same. Non-compliance to these instructions therefore resulted in selection of improper site which had to be consequently abandoned after incurring an expenditure of ₹2 crore.

Case II

In another case, Chief Engineer (P) Dantak recommended (June 2007) construction of major permanent bridge over 'Ritchu Nallah' on the Gangtok-Chungthang road which *inter alia* contained requirement of SSI as part of the project. Accordingly, HQ DGBR in July 2007 accorded AA and expenditure sanction for ₹2.55 crore for the work. CE (P) Swastik[14] concluded a contract in December 2009 for construction of the bridge with M/s Mohan Bajaj, Gangtok at a cost of ₹2.70 crore with completion period of the works by December 2011. The drawings for the bridge were however approved by HQ DGBR without carrying out SSI.

During execution solid strata on one side abutment of the bridge was found to be very loose and mixed with boulders and its further excavation was perceived by executives to be potentially threatening a breach in the existing road. The abutment location was therefore shifted but soil strata remained loose even at the revised location. The construction of a permanent bridge was therefore not considered possible and the contract was foreclosed by DGBR in February 2013. By that time an expenditure of ₹53 lakh had been incurred on the work.

We observed (January 2015) that the SSI, as recommended by the CE (P) Dantak was not carried out by DGBR before execution of foundation of the bridge, as a result appropriate soil strata for laying the foundation of bridge could not be found and therefore construction of bridge had to be abandoned after incurring an expenditure of ₹53 lakh.

The cases were referred to the Ministry in January 2016; their reply is awaited (March 2016).

[14] The work which was initiated by CE (P) Dantak, got shifted to CE(P) Swastik for execution.

5.2 Procurement of Cranes without proper need assessment

Against a demand for two lattice cranes, Director General Border Roads procured seven cranes for various Border Road Projects. The capacity of cranes procured was more than double of what had been demanded and approved. Due to sheer size and absence of adequate necessity, the cranes procured in 2012 at a cost of ₹6.81 crore remained underutilized to an extent of 86 *per cent.*

Lattice Crane with Grab buckets (Crane) is a specialized equipment for digging of sink wells in river bed for construction of pillars for the RCC foundation of a permanent bridge. Against a requirement projected by Chief Engineer (Project) Udyak for nine lattice cranes in the Budget Estimates of 2010-11 & 2011-12, Director General Border Roads (DGBR) accepted and included a demand for seven numbers of cranes in their Annual Procurement Plan 2011-12. Border Road Development Board (BRDB) approved the procurement of seven cranes of specifications similar to Tata PH-320 crane i.e. having load capacity of 18 tons, operating weight 23000 Kgs *etc* in AAP 2011-12. On approval, DGBR placed supply order (December 2011) on M/s Titagarh Wagons Ltd, Hoogly for procurement of seven cranes with load capacity of 40 tons and working weight of 46000 Kgs at a cost of ₹6.81 crore including transportation. Audit observed that not only was the capacity of the cranes so procured more than double of the requirement, but the boom size and overall width area was also larger by 22 and 41 per cent vis-a-vis the size of the cranes demanded by the users and approved by BRDB.

As per supply order five cranes were to be consigned to Project Brahmank and two cranes to Project Vartak. The firm supplied the Crane by October 2012 and commissioned the same by June 2013 at four different Projects as shown in the **Table-16** below:

Sr. No.	Name of the Project	Qty. in nos.	Date of commissioning
1.	Udayak	02	04/05/12 and 08/10/12
2.	Brahmank	02	10/05/12 and 01/11/12
3.	Vartak	02	11/10/12 and 24/06/13
4.	Arunank	01	31/10/12
	Total	07	

Immediately on receipt of supply and commissioning of equipment by the firm at Project Brahmank, Chief Engineer (P) informed DGBR (May 2012) that the cranes cannot move in mountainous terrain due to their sheer size, related parameters and the optimum use of the crane can only be done in plain areas, that too, in construction works. Further, it was stated that the limitations of its movement, assembling/dissembling time and other maintenance tasks made it unsuitable for deployment in their area of responsibility. Further Chief

Engineers (Project) i.e. Vartak and Brahmank also informed (September 2012 and October 2012) DGBR that one of the two cranes were surplus to their requirement and requested to transfer the same to other needy projects. DGBR therefore asked for the requirement of the crane from other projects. However, no demand was received, probably as most of the Border Road projects are located in similar mountainous terrains.

Audit analysed the usage records of the cranes and observed (June/September 2015) that against the laid down levels for utilization by DGBR the utilization of four cranes in three Projects *viz* Vartak, Brahmank & Arunank was as low 5.5 *per cent* to 7.9 *per cent* only. One crane at Vartak was lying without use for three years since its receipt (September 2012). Only in one Project (Udyak) where two cranes were commissioned, the utilization of both cranes was 26.09 *per cent* and 49 *per cent* of the desired level. Against an audit query regarding assessment of requirement of the seven cranes and about its low utilization, the DGBR stated (October 2015) that the requirement of cranes was assessed by the project on the basis of bridging targets and considering the enormous potential in permanent bridging work. It was also stated that since BRO units are located at remote and for flung areas, outsourcing of works like digging sink well was not possible, as induction of such huge equipment by the firms in remote areas involved huge effort and financial implication.

The reply is not acceptable as despite the requirement and justification, overall utilization of these equipment was only 14 *percent* against the desired level. Utilization of five out of seven cranes procured was less than 7.9 per cent. Further three Projects, where five cranes were commissioned, had not even raised demand for the equipment but were issued in spite of its limitations of operating in mountainous terrain. Thus, seven lattice cranes procured at a cost of ₹ 6.81 crore in anticipation of the bridging targets and potential permanent bridging work, remained underutilized by an extent of 86 *percent*. The assessment of requirement of those cranes was therefore inaccurate.

The case was referred to the Ministry in January 2016; their reply was awaited (March 2016).

CHAPTER-VI: DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION

6.1 Avoidable procurement of a mobile Nitrogen Gas Generator Plant

Despite no demand from Army for Nitrogen gas generator plant (Gas Plant), Combat Vehicles Research & Development Establishment (CVRDE), placed an order for development of a mobile Gas Plant, at a cost of ₹97.33 lakh. Development of Gas Plant by CVRDE was unwarranted as the plant had already been developed by the same firm for DRDO in July 2010 and supplied to Defence Research and Development Laboratory in January 2011.

Combat Vehicles Research & Development Establishment, Avadi, (CVRDE) projected (May 2010) a requirement for procurement of mobile Nitrogen gas generator plant (Gas Plant) to produce Nitrogen gas for use in the Army's main battle tanks (MBT-Arjun) during operations/trials in the field area. The requirement was justified on the ground that during strategic operation/war scenario, the gas cylinders may be required to be positioned deep in the forward area/war zone and the requirement cannot be met by procuring gas in cylinders from open market.

CVRDE placed an order in November 2011 on M/s GEM Pressure Systems (Firm) for supply of vehicle mounted mobile Gas Plant at a cost of ₹97.33 lakh. The Gas Plant was taken on charge in August 2012 and the firm was paid an amount of ₹97.33 lakh by March 2014.

We, however, noticed that even after lapse of three years, the Gas Plant was held (September 2015) in CVRDE and thus, not being used for the intended purpose in the field areas/operations.

When enquired (June 2015) in audit about the justification for development of the Gas Plant as it was lying unused since its procurement and does not find any use with the Army. DRDO HQ stated (October 2015) that being a research and development organization, CVRDE is required to visualize and develop state of the art system that will be advantageous in use of Armoured Fighting Vehicles.

The reply is not tenable as the procurement of the Gas Plant was not a developmental activity. The plant had already been developed by the same firm for DRDO in July 2010 and two such plants were supplied to Defence Research and Development Laboratory in January 2011.The Gas Plant was also demonstrated to the CVRDE Scientist who visited the Firm's premises in July 2011 i.e. before placing of the supply order by CVRDE in November

2011. The Scientist noticed that the integration, installation and assembly of components were well positioned. Thus, it could be seen that the Gas Plant was already developed for DRDO to meet the strategic requirement of the users, if any, and no further research and development work was involved except that it was to be mounted on a vehicle.

We also enquired about the possible induction of the Gas Plant into service as a strategic maintenance vehicle for Armoured regiments. The Director General Mechanised Forces (DGMF), as user, stated (December 2013) that their directorate was not pursuing any plan for acquisition of Gas Plant. It was added that the procurement of Gas Plant was an internal decision of CVRDE and Army had not given its concurrence or requisition for procurement of the Gas Plant. DGMF also stated that Nitrogen gas cylinders are authorised to Armoured Regiments for maintenance of MBT Arjun and the requirement, therefore, is for refilling of the cylinders that is carried out through Ordnance channel.

Thus, the placing of development order by CVRDE for an already developed Nitrogen Gas Generator Plant was unwarranted. The expenditure of ₹97.33 lakh was therefore avoidable as the plant did not find any use since its procurement in 2012.

6.2 Infructuous procurement of material

Despite being aware that C-103 material would not resist the high temperature generated in the scramjet engine, Defence Research and Development Laboratory procured 1329 Kg of C-103 material valuing ₹4.83 crore, which was unwarranted and eventually proved wasteful.

For ‘Design and Development of Hypersonic Technology Demonstrator Vehicle’ (HSTDV) by Defence Research and Development Laboratory (DRDL), a Technology Demonstration Project was sanctioned by Defence Research and Development Organisation (DRDO) in March 2001. DRDL undertook a feasibility study in September 2003, which *inter alia* included a study on design and development of scramjet engine. The study, *inter alia*, found that the temperature encountered in the scramjet engine combustor was of the range equivalent to 2227-2527^{o}C. DRDL therefore identified two high temperature resistant materials *viz* Nimonic C-263 and Niobium C-103, for possible use in the development of the engine.

On further study, DRDL found that C-263 was the suitable material which could sustain for 20 seconds flight duration. As far as C-103 material was concerned, the maximum temperature resistance capability was found to be 1200^{o}C, which could be enhanced only up to 1370^{o}C through coating technique.

As part of the HSTDV project, Ministry of Defence sanctioned (September 2005) a project for 'Development of Scramjet Engine and Engine Integrated Airframe' at an estimated cost of ₹48.65 crore, to be taken up by DRDL. The aim of the project was *inter alia* to design, fabricate and carryout testing of scramjet engine.

Scramjet engine is subjected to very high temperature DRDL identified (May 2006) C-103 material as High Temperature Resistant Material (HTRM) for inner layer of the engine and C-263 for the outer layer. Requirement of C-103 material, which has a shelf life of 10 years, was accordingly projected for development of five scramjet engines. However, keeping in view the anticipated design changes and high cost involved, the Special Purchase Committee (SPC) held in May 2006 recommended procurement of C-103 material for development of only three scramjet engines. DRDL accordingly procured (July 2007) a quantity of 1329 Kg of HTRM worth ₹4.83 crore which was received between October 2007 and October 2008. A quantity of 3660 Kg of C-263 material was also procured between December 2007 and February 2008 at a cost of ₹1.76 crore, for use in the project.

We observed in March 2012 that the feasibility study carried out in 2003 had specifically brought out that C-103 material can resist temperature only up to 1370^0C whereas the temperature generated in the scramjet engine combustor would range up to 2527^0C. Despite this known limitations, DRDL procured 1329 Kg of C-103 material. During the process of development, DRDL used only 107 Kg of the C-103 material and found that it could not withstand the high temperature beyond five seconds and therefore, the balance material was not further used.

We enquired (March 2012) about the justification for procurement of the material. DRDO HQ stated (January 2016) that due to severe oxidation problem/change in engine combustor design, C-103 material could not be used and C-263 material alone has been used for the scramjet engine development. It also added that though usage of C-103 material has limitation as the temperature experienced is more than 2300ºC, yet considering the ground test data it was expected that the same has potential for longer duration tests of the order of 100 seconds and 200 seconds with suitable anti-oxidation coating techniques.

The reply is not tenable as during the feasibility study itself, DRDL was aware that C-103 material had limitations to resist high temperature encountered in the scramjet engine combustor. Yet, it procured the C-103 material, which eventually proved wasteful. Besides, the Project proposal envisaged flight tests of short duration of 20 seconds, for which the material has failed, hence the possible usage of C-103 material for a longer duration flight tests of 100 seconds and 200 seconds is unlikely.

Thus, the procurement of C-103 material valuing₹4.83 crore for development of the scramjet project was unwarranted and proved wasteful.

CHAPTER-VII: ORDNANCE FACTORY ORGANISATION

7.1 Performance of Ordnance Factory Organisation

7.1.1 Introduction

7.1.1.1 Ordnance Factories are the oldest and largest organization in India's defence industry with a history that dates back to 1787· There are 41 Factories (including two Factories at Nalanda and Korwa under project stage) divided under five clusters or operating groups (**Table 17**) produce a range of arms, ammunition, weapons, armoured and infantry combat vehicles, and clothing items including parachutes for the defence services. They function under the Ordnance Factory Board (Board) which is under the administrative control of the Department of Defence Production of the Ministry of Defence of Government of India.

Table : 17

Operating group	Number of factories
Ammunition & Explosives	11
Weapons, vehicles and equipment	11
Materials & Components	8
Armoured vehicles	6
Ordnance equipment group	5
Total	41

Source:Annual Accounts of Ordnance Factories–2014-15

7.1.1.2 Status of Two Ordnance Factories under Project Stage

Ordnance Factory Project Nalanda was sanctioned (November 2001) by Government of India, Ministry of Defence as a new propellant factory for manufacture of 2 lakh Bi-Modular charge system *per annum* for 155mm ammunition at an initial cost of ₹ 941.13 crore, revised (February 2009) to ₹2160.51 crore. The project was due to be completed by November 2005, revised to March 2019. Expenditure incurred on plant and machinery, civil works and pre-operative expenditure up to 31 March 2015 amounted to ₹320 crore, ₹507 crore and ₹ 127 crore respectively. A total of ₹954 crore was spent for the project till 31 March 2015.

Ordnance Factory Project Korwa was sanctioned (October 2007) by the Government of India, Ministry of Defence for manufacture of 45,000 carbines *per annum* at an estimated investment of ₹ 408 crore. The time schedule for implementation of the project was initially fixed at October 2010, revised to March 2017. As of 31 March 2015, the Board expended ₹ 142 crore, ₹ 116 crore and ₹ 41 crore towards civil works, Plant and machinery and pre-operative expenditure respectively. A total of ₹299 crore was spent for the project till 31 March 2015.

Even after expenditure of ₹ 1253 crore, none of the project had accrued any benefits to the Board.

7.1.1.3 The objectives of the Board are:

- To supply quality arms, ammunition, tanks and equipment to armed forces;
- To modernise production facilities to improve quality;
- To absorb latest technology through Transfer of Technology and in-house Research & Development; and
- To meet customer satisfaction and expand consumer base.

7.1.1.4 Our analysis of the performance of the Board during 2014-15 places it, where relevant, against the above objectives.

7.1.2 Performance of Ordnance Factory Board

The data on key areas of management in the Board for the five years 2010-15 are summarized in **Table 18**[16]. **Annexure-IX** gives the details segregated across operating groups.

Table: 18

(₹in crore)

				Years			
		2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**Variation between 2014-15 and 2013-14 (%)**
I	**Financial Performance**						
	Revenue expenditure						
1	Budget Estimate (BE)	11,875	11,640	13,013	13,856	14,317	3
2	Final Grant	11,195	12,332	11,821	12,954	13,617	5
3	Actual Revenue expenditure (% utilization to Final grant)	10,903 (97)	12,141 (98)	11,936 (101)	12,834 (99)	12,832 (94)	(-)0.02
4	Excess (+)/Savings (-) (3)-(2)	(-) 292	(-) 191	(+) 115	(-) 120	(-) 785	554
5	Revenue receipts [17]	11491	12876	12553	12001	12001	0
6	Cost of issues to indentors	14253	16147	16181	15783	16380	4
7	Value of issues to indentors	15425	17273	17119	16122	16664	3
8	Profit (7) -(6)	1172	1126	938	339	284	16
	Capital expenditure						
9	Budget Estimate	769	400	400	436	1207	177
10	Final Grant	456	293	357	466	765	64
11	Capital expenditure (Actual)	454	279	349	465	746	60
12	Excess (+)/Savings (-) (11)-(10)	(-)2	(-) 14	(-) 8	(-) 1	(-) 19	1800

[16] Figures in the Table have been readjusted wherever found necessary.

[17]. Recoveries for supplies to Army, Airforce, Navy and other defence departments are shown as "deduct" under Minor Head 901 to 904 under Major Head 2079 up to 2013-14 in the Appropriation Account of the Defence Services.. With effect from 2014-15, the same is reflected separately in Annexure-'A' to the Appropriation Accounts of the Defence Services. Recoveries for supplies to other indentors are credited to the Major Head 0079.

		2010-11	2011-12	2012-13	2013-14	2014-15	Variation between 2014-15 and 2013-14 (%)
				Years			
II	**Cost of Production: Components**						
13	Cost of stores	8710	10070	9746	9303	9269	(-)0.37
14	Cost of labour	1319	1490	1617	1705	1959	15
15	Other costs *i.e.* Direct Expenses	136	159	216	239	274	15
16	Overheads	3847	4214	4393	4389	4973	13
17	**Total Cost of Production**	14012	15933	15972	15636	16475	5
18	Overheads as % of COP (16/17*100)	27	26	28	28	30	7
19	Labour costs as % of COP (14/17*100)	09	09	10	11	12	9
III	**Inventory**						
20	Stores-in-hand	5177	5336	5604	5588	5906	6
21	Work-in-progress (WIP)	2296	2551	2999	3538	3817	8
22	Stores-in-transit	669	538	682	854	887	4
23	Finished goods/components	1214	1212	1206	1305	1698	30
24	**Total inventory**	9356	9637	10491	11285	12308	9
25	Inventory as % of COP	67	60	66	72	75	4
26	WIP as % of COP	16	16	19	22	23	5
IV	**Labour & Machines**						
27	Numbers of direct industrial employees (DIEs)	48200	46568	47166	46206	44464	(-) 4
28	Ratio of DIEs : Supervisory officers	1.5:1	1.41:1	1.46 : 1	1.5 : 1	1.5 : 1	0
29	Production per employee (₹ in thousands)	1437	1674	1682	1680	1821	8
30	Labour hour utilization (%)	125	127	129	127	127	0
31	Machine hours available (in lakh hours)	1830	1577	1603	1203	1001	(-) 17
32	Machine hour utilization (%)	72	78	76	73	75	3
V	**Issues: Indentor-wise**						
33	Army	9225	10027	9609	8609	9098	6
34	Air Force and Navy	463	433	433	539	562	4
35	Other Defence Departments	111	192	138	147	164	12
36	Central Paramilitary Police Organizations (Ministry of Home Affairs)	635	826	831	782	650	(-)17
37	Civil trade including Exports	781	913	963	1046	889	(-)15
38	IFD supplies[18]	4210	4883	5145	4999	5301	6
39	**Total issues**	15425	17274	17119	16122	16664	3
VI	**Research & Development**						
40	Expenditure on R&D	40	36	48	43	56	30
41	R&D expenditure as % of total revenue expenditure	0.29	0.30	0.40	0.34	0.44	29
Source : Budget & Expenditure Statement of OFB and Annual Accounts of Ordnance Factories							

Our analysis of trends from the data in Table 2 is discussed in the succeeding paragraphs.

[18] IFD : Inter Factory Demand, whereby sister factories feed the need for stores of other factories.

Budgeting

7.1.2.1 Revenue expenditure & receipt

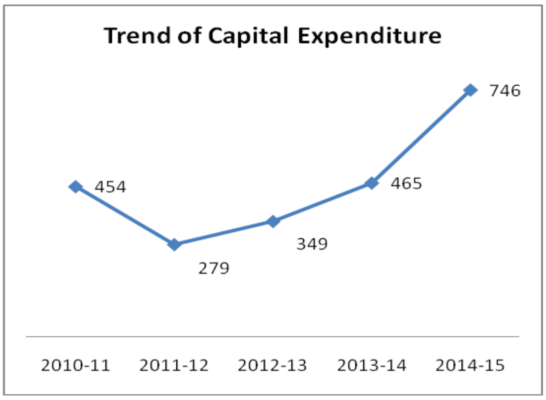
The Ordnance Factory Board (Board) receives budgetary grant under Grant No 25 to meet its running expenses *i.e.,* the revenue expenditure. The total grant was ₹13,617 crore in 2014-15. The Major head: 2079 is operated for booking its expenses and its recoveries against issues to the Defence establishment are shown by way of deduction under Minor Head 901 to 904 under Major head 2079**.** Another Major head 0079 records the receipts against sale of products to non-defence establishments, in the open market or exports, which is a credit to the Consolidated Fund of India.

The expenditure on Stores: ₹5687 crore which represented 44 *per cent* of the total expenditure was 14 *per cent* less than the budgeted figure of ₹6609 crore, and signified the most significant cut in expenditure made by the Board in 2014-15.

7.1.2.2 Capital expenditure

The Board also receives budgetary support for capital expenditure (Major Head 4076), also called the New Capital (NC) grant. This grant meets the expenditure on new projects including procurement of plant and machinery, for which ₹746 crore was spent in 2014-15. In addition, a separate fund called the Renewal and Replacement Fund (RR Fund) funds replacement of old machinery. Currently at ₹76 crore, the Fund has been created through yearly transfers from revenue grant[19].

Chart-6

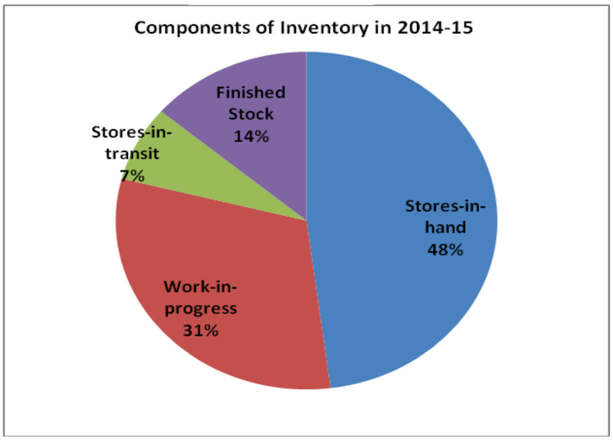


Capital expenditure under NC grant represented only three to five *per cent* of the total expenditure of the Ordnance Factory Board over the years. There had, however, been a 114 *per cent* increase in capital expenditure in 2014-15 over the figures of 2012-13 **(Chart 6).** The Ammunition & Explosive (A&E) group benefitted most from the capital procurements, accounting for 37 *per cent* of the capital expenditure.

[19] The amount transferred from Revenue grants (Major Head 2027) annually for the RR fund is equal to the annual depreciation of plant & machinery and expenditure for annual replacement.

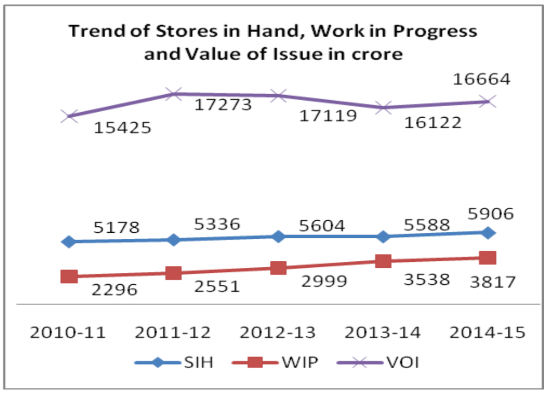
7.1.2.3 Inventory holding

Chart : 7



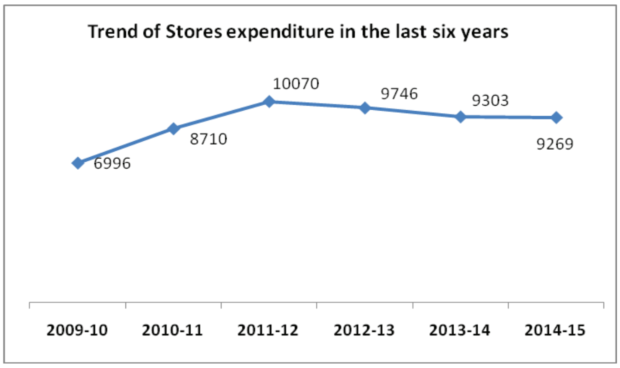
The inventory holding in the Factories increased by 32 *per cent* from ₹ 9356 crore in 2010-11 to ₹12308 crore in 2014-15. However, there was a marginal increase of nine *per cent* over the holding in 2013-14. The level of holding is high representing 75 *per cent* of Cost of Production in 2014-15. Almost half of the inventory is the Stores-in-Hand (**Chart 7**)**.** The Stores-in-Hand *i.e.*, stores procured for manufacture but not used within the year by the Factories of the Board, has shown an increasing trend in the last five years 2010-15. The Work-in-progress (items in semi-finished state of manufacture) also increased during the period (**Chart 8**).

Chart : 8



The high level of holding of inventory is a combination of several factors. In March 2010, the Board authorized the Factories for procurement to meet upto next three years' requirement along with staggered delivery[20]. This led to a significant increase in stores procurement since 2010 (**Chart 9**).

Chart : 9

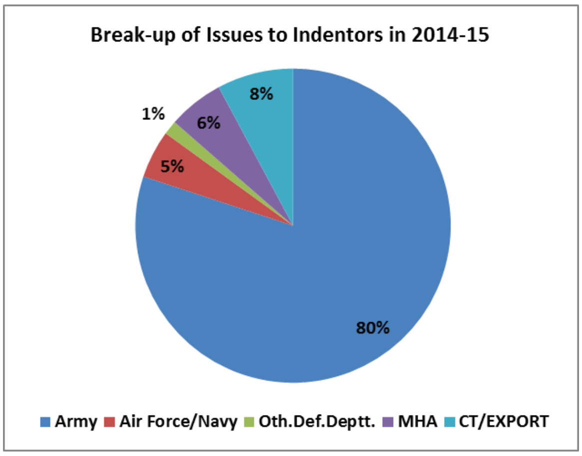


[20] The decision was for "procurement of input materials including IFD items against indent upto next three years' requirement (2 years+ 50% option clause) with Price Variation Clause(for trade procurement) and staggered delivery to conform to budget allotments and shelf life of Stores"

7.1.2.4 Value of issues: Turn-over

Value of Issues was increased by 8 *per cent* from ₹ 15,425 crore in 2010-11 to ₹16,664 crore in 2014-15. However, the increase was marginal in 2014-15 over 2013-14.

Chart : 10

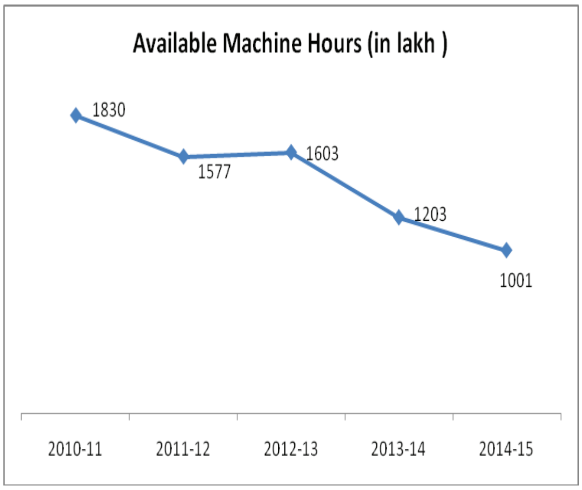


The Army is the major indentor for the products of the Ordnance Factories, accounting for nearly 80 *per cent* of the total issues during the year 2014-15 (**Chart 10**) with Civil Trade and Export being second at eight *per cent*.

Despite assurances by the Board on the discontinuance of issue of advance vouchers[21], we found that the practice still persisted. For instance, Gun and Shell Factory Cossipore, issued advance Issue vouchers worth ₹10 crore in March 2015 in issue of 84mm Rocket Launcher Mark-II (94 numbers) to Army though it was actually issued to the Army during April – June 2015.

7.1.2.5 Utilisation of Machines

Chart: 11



While the labour hour utilization was reported to be 127 per cent in 2014-15, machine hour utilization was 75 per cent only. The machine hours available reduced during 2010-15, showing a steady decline over five years (**Chart 11**). The decline could be attributable to the increased down-time of machines or because procurement of new machines did not keep pace with the condemnation of old & unserviceable machines. In this context, the status of un-installed plant & machinery becomes important, i.e., machines purchased but not commissioned to begin manufacture. A total of 364 machines valued at ₹1038 crore were lying un-installed in Factories with the Armoured Vehicle Group accounting for 44 *per cent* of the total un-installed machinery.

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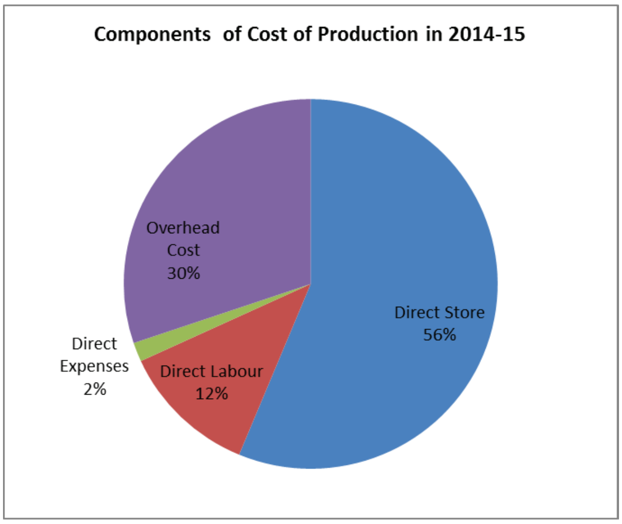
[21] Issue of advance vouchers means raising demand for payment from the indentors without physical issue of stores.

7.1.2.6 Cost of production & Recovery of costs

Stores account for 56 *per cent* of the cost of production in the Ordnance Factory Board. Overheads at 30 *per cent* of the cost of production are particularly high in the Ordnance Factory Board as depicted in **Chart-12.** The cost of production during 2014-15 at ₹16475 crore was a marginal increase over the figures of 2013-14. The composition of costs varies across operating groups (**Annexure-IX**) with the Armoured Vehicle Group and the Ammunition and Explosive (A&E) Group being most material intensive. The Ordnance Equipment Group which manufactures clothing and general purpose items was the most labour intensive among the Factories.

Chart : 12



The Cost of Overheads accounted for 30 *per cent* of the cost of production. The high overheads are a consequence of high committed cost on a workforce that is not directly deployed for production. Material and Components Group with some of the oldest factories of the Board reported the highest levels of overheads: fixed overheads and variable overheads being 25 *per cent* and 11 *per cent* respectively, a total of 36 *per cent* being the overheads as percentage of the cost of production.

Ordnance Factories rely mainly on sister factories for input stores, such stores being called Inter-Factory Demand: (IFD). The inefficiencies of IFD production as reflected in losses in their issue, are offset by surplus generated by the assembling factories. Together, IFD issues reported a loss of ₹83 crore in 2014-15, 11 per cent over the loss in 2013-14.

7.1.3 Our Audit Process

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

After completion of audit of each unit, Local Test Audit Reports (LTARs) containing audit findings are issued to the Head of the Unit. The units are requested to furnish replies to the audit findings within a month of receipt of the LTARs. Whenever the replies are received, audit findings are either settled or further action for compliance is advised. Important audit observations arising out of these LTARs are processed for inclusion in the audit reports which are submitted to the President of India under Article 151 of the Constitution of India. During 2014-15, audit of 94 units was carried out by employing 3910 party days. Our audit plan ensured that most significant units, which are vulnerable to risks, were covered within the available manpower resources.

We issued 513 LTAR Paragraphs during 2014-15. In addition, 1628 LTAR Paragraphs were outstanding as of 1 April 2014. A total of 822 Paragraphs were settled during 2014-15. As of 31 March 2015, 1319 LTAR Paragraphs are outstanding as detailed below:

Age	**No. of Paragraphs Outstanding**
More than Six months and upto 1 Year	458
More than 1 Year and upto 2 Years	252
More than 2 Years and upto 5 Years	549
More than 5 Years	60
Total	**1319**

The Ministry/Board may take appropriate action for expeditious settlement of old outstanding Paragraphs.

Planning

7.2 Extra expenditure due to delay in placement of order

Delay in finalization of the import order due to slippages at various levels of the factory and the Board resulted in extra expenditure of ₹4.58 crore in Gun Carriage Factory for procurement of 25 fully formed guns at a higher rate.

Procurement Manual 2010 of the Ordnance Factory Board (Board) stipulates[22] a time frame of 19 weeks from the date of working out the requirement to the date of placement of order for procurement cases. The Manual further provides[23] that every individual in the chain of the procurement process is accountable for taking action in a specified time period so that the requirement of Defence Departments is met on time.

Gun Carriage Factory, Jabalpur (GCF) manufactures Article 2A46M (fully formed gun) to be mounted in T-90 tanks at Heavy Vehicles Factory Avadi (HVF). The Board directed (November 2011) GCF to initiate import action for 25 guns from M/s. Rosoboronexport, Russia (RoE), the Original Equipment Manufacturer of the T-90 tanks.

GCF in turn floated (January 2012) a tender enquiry (TE) on RoE for procurement of 25 fully formed guns. In response to TE, RoE submitted (June 2012) a draft supplementary agreement to supply 25 fully formed guns at a total cost of USD 41.86 lakh. In the meantime, GCF received a directive (May 2012) from the Board emphasizing the need for positioning materials of T-90 guns for 2013-14 onwards in view of an indent to be received shortly from the Director General of Mechanised Forces for supply of 236 T-90 Tanks. Despite this, GCF dropped (August 2012) procurement action for 25 guns. However, after a lapse of four months, GCF again approached (January 2013) RoE to revive its offer considering the requirement of the guns for the year 2013-14.

However, RoE submitted (March 2013) an offer to supply 25 fully formed guns at a total cost of USD 47.31 lakh which was 13 *per cent* higher than their earlier offer (June 2012). The offer was valid up to May 2013. GCF did not take immediate action for procurement and after a lapse of two months GCF requested (June 2013) RoE to extend the validity period of their offer. RoE extended (June 2013) the validity of their offer up to 20 July 2013 subject to the condition that no further extension would be allowed and requested GCF to intimate their decision to them by 5 July 2013.

[22] Annexure 1 appended with paragraphs 5.5.2 of the Procurement Manual
[23] Paragraph 2.6.1 of the Procurement Manual

We observed that GCF referred (June 2013) the case to the Board for their sanction[24]. However, after a lapse of two months and expiry of RoE's offer, the Board returned (August 2013) the case to GCF stating that the financial power of the factory for procurement of stores from RoE was enhanced up to ₹50 crore as per the decision taken during the Board meeting held in July 2013. GCF thereafter took up the matter with RoE (October 2013) for extension of validity of offer up to January 2014. But RoE refused (December 2013) to entertain GCF's request and submitted (December 2013) a fresh offer to supply 25 guns at a total cost of USD 49.72 lakh. In March 2014, RoE on negotiation reduced their offer from USD 49.72 lakh to USD 49.07 lakh. The Tender Purchase Committee Level-I in its meeting (March 2014) decided to place order on RoE for supply of 25 fully formed guns at a total cost of USD 49.07 lakh.

Ultimately, after a lapse of more than two years from the date of initiation of procurement action against the stipulated period of 19 weeks, GCF entered (March 2014) into a supplementary agreement with RoE for procurement of 25 fully formed guns and released an advance payment of USD 7.36 lakh in favour of the RoE in January 2015 (nine months from the date of entering into SA). RoE delivered (August 2015) 25 fully formed guns and received (August 2015) the balance amount (85 *per cent*).

Due to delay in finalization of the import order due to slippages at various levels of the factory and the Board, GCF incurred an extra expenditure of ₹4.58 crore on procurement of 25 fully formed guns at a higher rate.

In reply, the Board stated (March 2016) that (i) since the GCF had met the HVF's requirement of guns up to 2012-13, they prudently dropped (August 2012) the procurement action for 25 guns particularly when no fresh indent from the Army (ultimately received only in December 2013) for the T-90 tanks and Inter Factory Demand (IFD) (received in September 2012) from HVF for the guns was received by the GCF; (ii) with the receipt of fresh IFD from HVF in September 2012 for additional quantity of guns, GCF approached (January 2013) RoE to revive its offer considering the requirement of guns for the year 2013-14, which was not accepted by RoE leading to submission of fresh commercial offer by RoE in March 2013; and (iii) after receipt of fresh commercial offer from RoE, GCF processed the case quickly for TPC/Board's approval as per the then financial power.

The reply is not acceptable since as against the HVF's IFD of November 2004 on GCF for manufacture and supply of 300 guns by December 2009, GCF had actually supplied only 211 guns up to March 2012 (150 imported guns and 61 ex-GCF guns) leaving a deficiency of 89 guns. Against the average production of 31 guns during 2010-11 and 2011-12 at GCF, import of 58 guns was

[24] Financial value of the transaction was not within the General Manager's financial power of ₹ 20 crore.

required to meet the balance requirement and the management should have finalized the import action at the RoE's commercial offer of June 2012. Hence, action of the Factory in dropping import action in August 2012 itself was injudicious.

Thus, delay in finalization of the import order due to slippages at various levels of the factory and the Board resulted in extra expenditure of ₹4.58 crore to Gun Carriage Factory for procurement of 25 fully formed guns at a higher rate.

The matter was referred to the Ministry of Defence (December 2015); their reply was awaited (March 2016).

7.3 Loss of savings due to failure to procure and install equipments

Failure of OFBL to timely procure and integrate (i) Computed Radiography System and (ii) LINAC machines led to consumption of costly X-ray films and chemical towards X-raying of filled shells, resulting in loss of opportunity to effect savings to the tune of ₹4.62 crore.

Ordnance Factory Badmal (OFBL), inter-*alia*, manufactures and supplies Round 125mm High Explosive Ammunition (ammunition) used in guns fitted on T-72 tanks. One of the quality tests, conducted in the Factory, is X-ray filming of filled ammunition with the help of a Linear Accelerator (LINAC) Machine[25].

Accidents of T-72 tank guns led the Ministry of Defence (Ministry) to constitute a Standing Committee[26] (March 2010) which recommended (January 2011) that the system be automated[27] and made online within six months. Accordingly, Ministry instructed (June 2011) Ordnance Factory Board (Board) for expeditious installation of the automated system. Accordingly, as per the recommendation of the Standing Committee and Ministry's instruction, the Factory had to install the automated system by December 2011. The system involved procurement and integration of a digital imaging system (as against the conventional method of using X-ray films and chemicals) with the existing LINAC machine at Unit -5 and Unit 10 section at OFBL.

[25] The LINAC is essentially a X-ray camera that through X-ray filming in four orientations, detects defects like Porosity, crack, piping and cavity. One LINAC machine each is installed at Unit-5 and Unit-10 of the Factory.
[26] Headed by Brigadier Neeraj Pathak.
[27] The automation of the machines would provide online digital images, *inter alia* bring down costs of costly X-ray films, bring in ease of analysis and facilitate longer duration of storage.

We observed that though existing LINAC machines were declared (October 2011) obsolescent[28] by OFBL, they initiated (November 2011) procurement action for replacement of LINAC machine at Unit -5 only. No action was taken by the OFBL to replace the obsolescent machine at Unit-10 as the same was in functional condition. The procurement action of LINAC machine for Unit 5 section also did not fructify (March 2016) owing to (a) failure of OFBL to finalise the technical bids submitted by two firms against Global Tender Enquiry (May 2012) within the extended validity period of July 2013 resulting in the OFBL deciding (November 2013) to go for retender and (b) submission of fresh demand (June 2015) for replacement of LINAC machine by OFBL to the Ordnance Factory Board for approval after a lapse of 19 months which ultimately resulted in issue (September 2015) of Global Tender Enquiry by the Factory after obtaining approval (June 2015) from Board. OFBL was under the process of finalizing the offers received against its GTE (September 2015) as of March 2016.

We also observed that even though the Factory was required to procure and install the digital imaging system for integration with the two LINAC machines by December 2011 of latest technology, OFBL initiated the proposal for procurement of Computed Radiography System (digital imaging system) only in August 2015, which was approved by the Board in December 2015 at an estimated cost of ₹0.75 crore. OFBL, after receiving the approval from the Board in December 2015, issued a draft advertisement (February 2016) to the Director of Advertisement and Visual Publicity, New Delhi for publishing the Tender with due date of opening on 23 March 2016.

While justifying (August 2015) the procurement of Computed Radiography System, OFBL worked out the savings of ₹1.10 crore per annum by working out the total expenditure using Films and chemicals under the conventional system at ₹4.02 crore per annum and the total expenditure using Computed Radiography System at ₹2.92 crore per annum (cost of Computed Radiography system and cost of IP plates and cassette per annum) for the first year and potential savings of ₹1.84 crore from the second year onwards (excluding the cost of Computed Radiography System subsumed during the first year itself).

Thus, failure of OFBL to timely procure and install Computed Radiography System coupled with their decision to use the obsolescent LINAC machine at Unit 10 instead of replacing with new machine led to consumption of costly X-ray films and chemical towards X-raying of filled shells of 125mm ammunition since 2012-13 and thereby lost an opportunity to effect savings of ₹4.62 crore.

On being pointed out in Audit (January 2016), Board stated (March 2016) that delay in finalizing the technical bids against OFBL's GTE (May 2012) was attributed to non-availability of sufficient information/expertise to process such proposal that led to seeking lot of clarifications relating to technical

[28] Equipment is technically obsolete (not capable to carry out its required role) and prototype of an advanced version of the equipment has come up in the market but the equipment is required to be retained in the service for tactical requirements/training etc.

specifications. With regard to 19 months time period taken by the OFBL for submitting fresh demand for the LINAC machine, Board stated (March 2016) that when the case went under retender, OFBL undertook feasibility study and found that in none of the establishments, High caliber High Explosive shells were X-rayed with LINAC machine with digital radiography and hence, the specification was framed based on the response received from reputed manufacturers against Request for Information and in consultation with the High Energy Material Research Laboratory, Pune. Board also confirmed that four offers received by OFBL against retender (September 2015) were being processed (March 2016).

The reply is not acceptable because even though the technical bids received from the firms against GTE (May 2012) were opened in September 2012, OFBL took nearly three months to seek clarifications from the Firms in December 2012 and despite receiving clarifications immediately in December 2012 itself, the Factory did not finalise the case even as of July 2013 which led to the Firms not extending the validity period of their offer up to October 2013 as sought for by the Factory. Further, Board's justification for time period of 19 months for submitting fresh demand on the Board against retendering action only indicate that OFBL did not apply their mind properly while acting upon the Ministry's instruction (June 2011), as the reasons brought out by the Board for 19 months time period for retendering action was known to the Factory as early as in November 2011 when they initiated procurement action for LINAC machine at Unit-5. Even after retendering (September 2015) with due date of opening tender extended up to December 2015, the procurement action was yet to be finalized (March 2016). As a result, OFBL continued use of obsolescent machine at Unit-10 by consuming costly X-ray films and chemicals and lost a potential saving of ₹4.62 crore owing to non-position of LINAC machine with computed radiography system timely.

The matter was referred to the Ministry of Defence (January 2016); their reply was awaited (March 2016).

Procurement of Machinery

7.4 Failure to operationalise a machine

Acceptance of a Machine valuing ₹6.32 crore by Vehicle Factory, Jabalpur without proving the Machine for performance and subsequent neglect in preventive maintenance resulted in its breakdown since June 2012.

Vehicle Factory Jabalpur (VFJ) placed (February 2008) a supply order (S.O) on an Ahmedabad - based firm: M/s. Sahajanand Laser Technology Limited, (Firm) for a CNC Laser Cutting Machine (Machine)[29] at a total cost of ₹6.61 crore[30]. The machine was scheduled for delivery by 15 September 2008. The Supply Order stipulated that:

- Before the Machine is dispatched by the Firm to VFJ, a Pre-Dispatch Inspection (PDI) would be conducted in which the Machine would be tried out for cutting performance with all MS sheets of requisite thickness[31] at firm's premises in the presence of VFJ's inspectors before dispatch of machine;

- The Firm was required to undertake the commissioning of the Machine within 90 days from the date of receipt of Machine at Site. The Machine would be run for four weeks on production to prove the consistency in accuracy and cycle time before final acceptance of Machine by VFJ ;

- The Machine should prove the cutting of all the materials of various thickness[32] and achieve desired performance level in all the parameters. Minimum 25 components were required to be proved for each category of material;

- 80 *per cent* value of material plus 100 *per cent* taxes/duties would be paid after acceptance in Pre-dispatch inspection at Firm's works and on receipt of the machine at VFJ and balance 20 *per cent* value of the material after commissioning and on furnishing of Performance Bank Guarantee (20 *per cent* of the contract value) valid beyond 60 days after expiry of warranty period. A Commissioning Report and the Final Acceptance Report would be issued by VFJ which will form the basis of payment of 2nd instalment to the Firm

We observed that during PDI (10 December 2008) at the Firm's premises, the inspection team of VFJ noticed deficiencies[33] in dimensional accuracy, consistency and quality in the Machine. Further, cutting speed of the Machine in respect of Mild Steel of 12mm, 16mm and 25mm thickness was not carried out as required under the Supply Order and Technical Specification of the Machine.

Despite the deficiencies and incomplete performance testing, the inspection team cleared the machine for dispatch subject to the Firm attending to the deficiencies and issued (10 December 2008) the Inspection Report.

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29 Required for production of sheet metal and pipe components made of mild steel, stainless steel, armour steel *etc* and Aluminium alloy

30 reduced to ₹6.32 crore due to reduction in Excise Duty

31 1mm, 2mm, 3mm,4mm,5mm,6mm,8mm,10mm,12mm,15mm,20mm and 25mm thickness as Para 12 of the Supply Order read with Para 5 of Technical Specification of the Machine

32 Mild steel 1mm to 25mm, Stainless steel 1mm to 20mm, Aluminium Alloy 12mm, Armour Steel 16mm and Jackal steel 10mm as per Para 24 of the Supply Order

33 Deep marks of serration shape were observed in 25mm pieces.

The Machine was received at the Factory on 28 December 2008 and taken on charge on 17 January 2009. Accordingly, VFJ released (January 2009) ₹5.09 crore to the Firm. The Firm undertook erection and commissioning work of the machine at VFJ since 20 January 2009.

We noticed that the Firm failed to achieve the cutting parameters of the Machine during commissioning trials. In the meetings (September 2009) with the Firm, VFJ directed the Firm to rectify the deficiencies. However, a 'Commissioning Report[34] was issued (27 November 2009) declaring the Machine as commissioned on 9 October 2009, without indicating the deficiencies to achieve the cutting parameters. A Final Acceptance Report[35] was not issued. On the same date (27 November 2009), VFJ reported to the Firm various operational problems[36] during the commissioning, apprehending possibilities of breakdown of Machine or reduction in performance level with non-availability of Machine for production. This raises doubts on the integrity of the process by which the Machine was declared commissioned (9 October 2009) and the payment of the balance amount of ₹1.23 crore was released by the Local Accounts Office (LAO) based on the Commissioning Report. The LAO also deviated from procedures by releasing the payment without the Final Acceptance Report of the Machine.

We noticed that the VFJ did not maintain the production log book since commissioning of the Machine for more than two years (up to December 2011). However, in the meeting with the Firm, the VFJ recorded (August 2011) that the Machine was operated only for 7578 hours up to 3 August 2011. In the absence of production log book, the cutting details of different materials could not be verified in Audit.

We observed that since commissioning, the Machine developed problems[37] and went into repeated breakdowns from time to time for 169 days during March 2011 to December 2011. The Firm ascribed (July 2011) the break down to absence of periodic preventive maintenance by VFJ. VFJ did not[38] enter into an Annual Maintenance Contract after the lapse of warranty period (November 2010) although the Firm proposed it in July 2010. In response to the Audit query (November 2015), VFJ told us that no preventive maintenance record was traceable.

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[34]Signed by the representatives of the Mechanical maintenance, Electrical Maintenance and Production Departments.

[35] Required by the Appendix –W of the Manual for procurement of plant and machinery in Ordnance Factories.

[36] loading/unloading device, surface finish achieved during cutting, frequent breaking of focusing lens, problems in the table movement etc.,

[37] Problems being leakage of coolant from shutter assembly and malfunctioning of chiller units as well as breakage of Z-axis of ball screw mechanism.

[38]Firm's proposal for Annual Maintenance Contract for the machine was approved by General Manager in September 2010 with the remarks that the Firm may be requested to bring down the AMC rates which was considered very high. However, no action was taken thereon by the Factory.

VFJ spent ₹15.25 lakh[39] on unfruitful repairs but eventually the Machine went under break down since 13 June 2012. It remained non-operational as of November 2015.

In response to the Audit query (April 2013), VFJ stated (April 2014) that the Firm had been approached for restoration of the Machine but it was insisting on clearing pending payments[40]. The Firm had also not made any commitment schedule of spares which could aid VFJ to put the Machine to use. As a result of the stalemate, no remedial action could be taken.

The reply was silent as to why the Machine was cleared for dispatch despite deficiencies in PDI; a Commissioning Report issued despite deficiencies in commissioning trials; and payments released without the Final Acceptance Report. The reply also accepts the inaction that led to the Machine being non-operational since June 2012.

Thus, acceptance of a Machine valuing ₹6.32 crore by VFJ without proving the Machine for performance and subsequent neglect in preventive maintenance resulted in its breakdown since June 2012.

We recommend that the matter be investigated to fix responsibility.

The matter was referred to the Ministry of Defence/Ordnance Factory Board (January 2016); their replies were awaited (March 2016).

Manufacture

7.5 Injudicious manufacture of cartridge cases

Manufacture of excess quantity of 20,997 numbers of cartridge cases with CED coating by Metal and Steel Factory Ishapore, prior to successful clearance of pilot lot in trials and in deviation from the decision of the Alteration Committee, resulted in avoidable rejection loss of ₹1.32 crore.

Ordnance Factory Khamaria (OFK) and Metal and Steel Factory Ishapore (MSF) undertook indigenous manufacture of 23mm Schilka ammunition Steel Cartridge Cases having carbon content 0.09-0.13 per cent with zinc coating

[39] Against a total bill of the contractor of ₹45.27 lakh (including service charges of ₹3.14 lakh), payment of ₹15.25 lakh was released. Balance amount of ₹30.02 lakh being the liability of the VFJ.

[40] Pending payments relating to a service charge which was due to be paid to the Firm for sending Service Engineers to the Factory.

since 1997[41] and January 2002 respectively, based on Transfer of Technology received from M/s Kintex Bulgaria in 1984.

Army units reported from time to time 139 accidents with use of ammunition which on analysis revealed that 107 accidents pertained to imported ammunition and 32 accidents related to Ordnance Factory manufactured ammunition. The accidents were basically due to cartridge case rupture/burst/crack/rim shear and primer blown off.

The Alteration Committee (Committee) comprising representatives of OFB and Inspectorates of the Director General of Quality Assurance, New Delhi analysed the reasons for various problems faced during the use of ammunition by the Army units from time to time, as well as those encountered during manufacturing at Ordnance Factories and subsequent proof of ammunition.

In order to overcome the problems, the Committee recommended (November 2004) MSF to enhance the carbon content of the steel cartridge case from 0.09-0.13 *per cent* to 0.16-0.22 *per cent*, duly coated with Cathodic Electro Deposition (CED)[42].

We observed that even though the CED coating was found compatible with propellant of the ammunition and satisfactory by the Controllerate of Quality Assurance (Ammunition) in February 2005, one lot of cartridge case coated with CED failed in corrosion resistant behavior. The committee, therefore, recommended MSF (December 2006) to further manufacture 1,000 cartridge cases with improved CED coating and subject them the same to (i) corrosion resistant behavior test (10 samples) at Controllerate of Quality Assurance (Metals) Ishapore (ii) Compatibility test (5 numbers) at Controllerate of Quality Assurance (Military Explosive) and (iii) dynamic test (86 numbers). Bulk Production Clearance (BPC) for the CED coating was scheduled to be accorded after successful clearance of the samples in three tests.

As the performance of steel cartridge case with enhanced carbon content coated with Zinc was found satisfactory during firing, the Committee in July 2007 authorised MSF to manufacture two lots comprising 5,000 numbers of cartridge cases each with new chemistry carbon content and zinc coating and subject them to proof before according bulk production clearance for steel cartridge case with enhanced content.

We observed that 10,000 number of cartridge cases manufactured by MSF with enhanced carbon content and duly coated with Zinc was successfully fired at OFK in October 2007 and November 2007. Accordingly, the Committee accorded (November 2007) BPC to MSF for manufacture of

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[41]Though the ToT was received in 1984, indigenous manufacture at OFK was undertaken only in 1997 since the CKD/SKD received from M/s Kintex were assembled during 1987-91 and there was no demand for the ammunition from the Army during 1992 to 1996.
[42]Electroplating of copper in the cartridge cases.

cartridge cases with enhanced carbon content with zinc coating since (i) results of 100 grams of CED coating material sent to CQA (ME) for compatibility test was not received and (ii) 250 numbers of cartridge cases with CED coating failed in corrosion resistance test at CQA (Metals) Ishapore in August 2007 and November 2007 rendering CED coating unacceptable unless otherwise perfected. Further, during the meeting held in May 2008, the Committee recorded that (i) exercise of CED coating for its efficacy as alternate to Zinc passivation was going on; (ii) 10 numbers of samples were under test for corrosion resistance; and (iii) further 490 numbers of CED coated components were available at MSF.

The matter regarding improvements of steel cartridge cases and its surface coating was discussed in the office of the Joint Secretary/Defence Production New Delhi in August 2010 wherein it was decided that Ordnance Factory Board would supply improved 10,000 rounds of ammunition duly for firing to gain users' confidence. Further, as a sequel to the discussion taken in August 2010, the Committee met in September 2010 at MSF wherein the introduction of CED coating in place of zinc coating was recommended subject to successful trials of 20 samples of cartridge cases duly coated with CED in salt spray test. Thus, effectively the Committee recommended MSF to manufacture only pilot lot of 1,000 cartridge cases under new chemistry duly coated with CED for subjecting them in various tests before according BPC for steel cartridge cases with CED coating.

In view of failure of the pilot lot of cartridge case duly coated with CED in corrosion resistance test and occurrence of longitudinal and circumferential ruptures cracks during proof held subsequently, further coating of CED on the surface of Steel Cartridge cases was closed at MSF once and for all since December 2012.

We observed that even though the committee recommended MSF to manufacture 1,000 numbers of new chemistry cartridge case coated with CED as pilot lot[43] for trials, the factory actually manufactured 21,997 numbers of new chemistry cartridge cases against five warrants (November 2006- 2011) at a cost of ₹1.38 crore[44] and got it coated with CED at a total cost of ₹1.05 lakh against three supply orders placed between February 2007 and September 2010. However, cost cards were not made available to Audit, though called for (July 2015- January 2016). Thus, MSF sustained a loss of ₹1.32 crore towards avoidable coating of 20,997 numbers of new chemistry cartridge cases with CED.

[43] For any development item, production is carried out on the pilot lot and based on successful performance of the pilot lot in trials/proof, bulk manufacture of the item are normally undertaken at Ordnance Factories. This is to safeguard Ordnance Factories from sustaining huge losses in case the items manufactured in bulk fails in proof/trials.
[44] Unit cost of cartridge has been furnished by the Factory management.

In reply, Ministry stated (September 2015) that CED coated new chemistry cartridge cases were manufactured by MSF as per the decision taken in various forum and the matter was referred to the Project Monitoring Team who was looking into the failures of cartridge cases for suggesting further course of action.

Ministry's contention is not acceptable since MSF's decision for bulk manufacture of 20,997 new chemistry cartridge cases coated with CED even before successful clearance of pilot lot in trials, was in violation of Committee's recommendation and was imprudent resulting in avoidable rejection loss of ₹1.32 crore.

Thus, manufacture of excess quantity of 20,997 numbers of new chemistry cartridge cases with CED coating by MSF in deviation of the decision of the Alteration Committee as well as prior to successful clearance of pilot lot in trials resulted in avoidable loss of ₹1.32 crore towards rejection.

Miscellaneous

7.6 Blocking up of inventory due to non-replacement of rejected fuses

Failure of Ordnance Factory Chanda to invoke and follow-up on the remedial provisions of the contract on supply of fuses resulted in holding of rejected fuses worth ₹6.05 crore.

Ordnance Factory Chanda (OFCh) entered (February 2012) into an agreement with M/s. Kintex Shareholding Company, Bulgaria (Firm) for delivery of 50,000 fuses at a cost of ₹9.08 crore[45]. The B-429E fuse filled with explosives (fuse) would be received, inspected by OFCh and sent directly to the Army on behalf of Ordnance Factory Badmal (OFBL)[46]. The scheduled date of delivery was October 2012[47] with full payment[48] to be released by the OFCh on receipt of consignment.

The agreement provided the following conditions to ensure compliance to quality of the items being imported:

- Pre-dispatch inspection (PDI) of the fuses at the Firm's premises in the presence of OFCh representative. In case, OFCh did not attend the PDI,

[45] Equivalent to Euro 14 lakh
[46] OFBL is the filling factory for 125mm High Explosive ammunition for which the B-429 fuse is used.
[47] The scheduled date was August 2012 which was subsequently extended (September 2012) to October 2012
[48] 100 per cent of the contract value by an irrevocable letter of credit opened through State Bank of India Nagpur

the conformity and acceptance report would be signed by the Firm's Quality Assurance representative which would be binding on both the parties. In that event, consignment would be delivered by the Firm under their warranty/guarantee Certificate;

- Joint Receipt Inspection (JRI) of delivered goods in the presence of Firm's representative for which a minimum 15 days' prior notice was to be given by OFCH to the Firm. In case, the Firm's representative did not attend the consignee inspection, the consignee end Inspection proceedings and Acceptance Certificate would be signed by the OFCh's representative only and the same would be binding on the Firm;

- In case of deficiencies in quality or defects, a quality claim would be raised by OFCh which shall be settled by the Firm within 45 days from the date of receipt of the claim ;

- The Firm would provide a *Performance Guarantee Bond* of Euro 1.4 lakh which would be encashed by OFCh if the conditions of the contract were not fulfilled by the Firm;

- Should there be a dispute on discharge of contractual obligations, OFCh would notify the dispute to the Firm and within 60 days of such notice, the case would be referred for Arbitration.

OFCh received (December 2012) 50,000 fuses in three lots[49] along with warranty/guarantee Certificate from the Firm against payment of ₹10.08 crore[50] without PDI.

OFCh did not invite the Firm for JRI. While one lot (Lot No 4) comprising 10,000 fuses were rejected[51] in quality inspection (February 2013 and May 2013), another lot (Lot 2) of 20,000 fuse was accepted (May 2013).

OFCh preferred (May 2013) a Quality claim on the Firm for free replacement of the defective fuses: Lot No: 4. The Firm did not agree on the ground that the test conditions for dynamic testing were not complied with. The Firm, however, proposed (June 2013) to send their team to OFCh. It was proposed that the team would discuss the conditions under which dynamic tests were conducted in India as well as to attend the test of the balance 20,000 fuses (Lot No 3), which was yet to be tested at that time.

The Firm complained (July 2014) to the Board / OFCh that despite multiple mutual attempts to resolve the situation, they were not provided

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[49] Lot No 02-12-33 for 20000 fuses, Lot No 03-12-33 for 20000 fuses and Lot No 04-12-33 for 10000 fuses

[50] ₹10.04 crore being the cost of fuses and ₹0.04 crore towards banking charges.

[51] Post impact delay beyond the acceptable range of 15m to 60m at two occasions of dynamic shooting at Central Proof Establishment, Itarsi

with[52] a viable option to accomplish it. The Firm suggested (July 2014) having a meeting in India to resolve the issues and if required to conduct repeated proof of Lot No 4 and new proof of Lot No 3. The Board directed (August 2014) OFCh to settle the issue with the Firm. The Firm did not send their representative.

OFCh again carried (March 2015) out the dynamic check proof of Lot No 3 and Lot No 4 without the presence of Firm's representatives. Lot No 4 was once again rejected; Lot No 3 was also rejected and a quality claim was raised. The rejection of both the lots were intimated (April 2015) to the Firm. The Firm did not agree with the sentencing[53] (May 2015) and once again proposed a meeting in India to resolve this issue. OFCh in reply requested (November 2015) the Firm to send their personnel in India for discussion.

The quality claim in respect of Lot No 4 and Lot No 3 remained unsettled since May 2013 and April 2015 respectively (against the stipulated period of 45 days). But no action was taken by OFCh/OFB to issue a Notice to the Firm for referring the matter to an Arbitration Tribunal in accordance with the Arbitration clause in the contract. OFCh also did not (March 2016) initiate action to encash the performance guarantee bond of Euro 1.40 lakh (equivalent to ₹ 1 crore) submitted by the Firm though it was valid up to 31 March 2016.

Board stated (March 2016) that the matter was under consideration of OFCh to settle the issue amicably. They further added that OFCh could not invoke the remedial provisions of the contract because the final decision of acceptance/rejection of the quantity in question had not been arrived at till date.

The contention of the Board is not acceptable because even after a lapse of more than three years from the date of preferring the quality claim, the matter remained unresolved.

Thus, failure of OFCh to invoke and follow-up on the remedial provisions of the contract on supply of fuses resulted in holding of rejected fuses worth ₹6.05 crore[54].

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[52] Cancellation of a meeting in September 2013; proper conditions were not provided for normal conduct of delay function proof in February 2014 and Firm's request to organize a joint meeting in India are not still satisfied by OFCh/OFB.

[53] The grounds for such disagreement being that the documents provided by OFCh did not contain sufficient data about the rounds used in the lot tests on 18th March 2015 and it was presumed that, as in the tests carried out in February 2014 a projectile containing incendiary composition had also been used in March 2015 and hence attributed failure of fuse to initiation of the incendiary composition but not the fuse.

[54] Cost of 50000 Filled fuses = ₹10.08 crore. Proportionate Cost of 30000 Fuses = ₹10.08 crore x 30000/50000 = ₹6.05 crore.

The case was referred to the Ministry of Defence (January 2016); their reply was awaited (March 2016).

7.7 Recovery at the instance of Audit

Avoidable payment of bank charges (₹18.90 lakh) for establishment of Letter of credit by Ordnance Factory Medak was recovered by the unit after pointed out in Audit.

Ordnance Factory Medak (OFMK) recovered avoidable payment of ₹18.90 lakh towards bank charges after Audit pointed out the irregularity. The detail is given below:

Ordnance Factory Board (Board) entered (March 2011) into a Memorandum of Understanding with M/s. Mishra Dhatu Nigam Ltd. (MIDHANI) for creation of balancing facilities for manufacture of wide armour plates, required by OFMK at MIDHANI at an investment of ₹507 crore, out of which the share of Board was ₹307 crore. A Tripartite Agreement (Agreement) was concluded between the Board (on behalf of OFMK), MIDHANI and State Bank of India, Hyderabad for opening an Escrow Account to carry out the banking transactions. As per clause 3(ii) of the Tripartite Agreement, all bank charges towards establishment of Letter of Credit (LC), amendment to LC etc. would be borne by the MIDHANI.

OFMK, however, authorized (October 2012) the State Bank of India, Hyderabad to debit banking charges of ₹18.90 lakh (July 2012) from the Escrow account of the Board for establishment of LC against MIDHANI's purchase Order (May 2011) for import of an equipment, though bank charges were to be borne by MIDHANI as per the Agreement.

On this being pointed out in Audit (March 2014), OFMK referred the matter and obtained (November 2015) a refund of ₹18.90 lakh from MIDHANI. In reply, the Board confirmed (March 2016) that the recovery of ₹18.90 lakh been effected at the instance of Audit.

The matter was referred to the Ministry of Defence in January 2016; their reply was awaited (March 2016).

Chapter-VIII :Defence Public Sector Undertakings

8.1 Delay in supply by Defence Public Sector Undertakings (DPSUs)

Defence PSUs failed in their objective of supplying critical weapons and equipment meant for modernisation and capability enhancement of Army. Of the capital contracts concluded with DPSUs during XI Army Plan (2007-12), inordinate delays were observed in contracts valuing ₹30,098 crore which constituted 63 *per cent* of the money value of total contracts concluded by ministry with DPSUs. Major reasons for delay were undue time taken in development, delay in successful evaluation of pilot sample, heavy dependence of DPSU on foreign vendors, ambiguity in contractual terms, etc. The delay had not only impacted the modernisation of Armed Forces, but also had financial implications towards accrued interest on payments lying unutilised by DPSUs.

8.1.1 Introduction

In order to achieve self-reliance in the field of defence, Defence Public Sector Undertakings (DPSUs) and Ordnance Factories (OFs) were set up in phases to assume the role of designer and integrator of defence weapons and equipment under the ambit of Department of Defence Production (DDP) in Ministry of Defence.

In May 2001, the Government took a decision to open defence industry for Indian private sector with an aim of creating a competitive defence technology edge and strengthen the defence industrial base in the country. In order to boost the domestic industry Government allowed 26 *per cent* Foreign Direct Investment (FDI) in defence sector in 2001, which was increased up to 49 *percent* in 2014.Defence sector being a subset of manufacturing industry, synergy between "Make in India"[55] policy and capability of our defence industry in terms of value addition, self reliance in critical technology, etc becomes crucial. Irrespective of the policy orientation of the Government, it is imperative for DPSUs to endeavour for continuous modernisation and up-gradation of their capabilities and widening their product range. As of September 2015 there were 40 OFs and nine[56] DPSUs to cater for the needs of

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[55]Make in India is an initiative of the Government of India (launched in September 2014) to increase share of manufacturing from the current level of 15 *per cent* of Gross Domestic Product (GDP) to 25 *per cent* and create additional employment opportunity of ten million per year by encouraging multi-nationals as well as domestic companies to manufacture their products in India.

[56]Nine DPSUs are: 1. HAL – Hindustan Aeronautical Limited, 2. BEL - Bharat Electronics Limited, 3. BEML – Bharat Earth Movers Limited, 4.MDL – Mazagon Dock Limited, 5. GRSE – Garden Research Ship Establishment, 6. GSL – Goa Shipyard Limited, 7. BDL –

defence sector, either by productionising the technology developed by Defence Research & Development Organisation (DRDO) or by absorbing Transfer of Technology from foreign vendor so as to attain self-reliance.

In Army, procurement for all equipment valuing ₹15 lakh each or more with a life of seven years or more is called capital procurement. Capital procurements are made as per the provisions contained in the Defence Procurement Procedure (DPP). All capital acquisitions are initiated by users directorate in Army HQ with formulation of Qualitative Requirements and seeking Acceptance of Necessity (AON) of Defence Acquisition Council (DAC[57])/Defence Procurement Board (DPB[58])/ Categorisation Committee[59]. Once approved, the same are processed by Acquisition Wing in the Ministry and Weapon and Equipment (WE) Directorate in Army HQ till conclusion of the contract in stages. In design and development cases, Army HQ, on being satisfied with the trials of the equipment, initiate the proposal for acquisition and seek approval of Defence Acquisition Council (DAC)/ Defence Procurement Board (DPB) thereon. While doing so, approval may also be taken on need for limited validation trials, in the form of First Off Production Model (FOPM) or waiver of trials.

Execution of contracts, including payment of advances and other payments, delivery, installation, commissioning, spares support, inspection, training etc. is to be carried out as per terms and conditions indicated in the contract. The evaluation of FOPM, where the equipment is developed and production is made at Defence PSU, is carried out and on successful evaluation of the same Bulk Production Clearance (BPC) is accorded.

8.1.2 Scope of Audit

During XI Plan (2007-2012) in respect of Army, 180 capital contracts were concluded, out of which 56 contracts were concluded with DPSUs, of which delay occurred in 18 contracts as shown in **Table -19**:

Bharat Dynamics Limited, 8. MIDHANI – Mishra Dhatu Nigam Limited and 9. HSL – Hindustan Shipyard Limited.

[57]DAC is headed by RakhsaMantri which approves the procurement proposal of money value more than ₹300 crore.

[58]DPB is headed by Defence Secretary which approves the procurement proposal of money value from₹150 crore to ₹300 crore.

[59]Categorisation Committee is headed by Vice Chief of Army Staff (VCOAS) which approves the procurement proposal of money value less than ₹150 crore.

Table-19: Details of contracts concluded during 11th Plan (2007-12)

Sl. No.	Particulars	No. of Contracts	Money value (in ₹ crore)
1.	Total Capital contracts for Army during 11th Plan	180	63,173
2.	Contracts with vendors other than DPSUs	124(69)	15,753(25)
3.	Capital contracts with DPSUs during 11th Plan	56(31)	47,420(75)
4.	DPSUs contract where delay occurred	18(32)	30,098(63)

Note: The figures in brackets denote the percentage.

We examined 18 contracts valuing ₹30,098 crore (63 % of total value of DPSUs contracts) where supplies were not completed as of July 2015 by DPSUs despite lapse of probable date of completion (PDC) stipulated in the contracts as shown in **Annexure X.**

8.1.3 Audit Objective

- To assess whether contracts with DPSU were in congruence with user requirement;
- To assess the extent of planning and feasibility ensured before undertaking the project;
- To assess the extent of efforts made by the Ministry/DPSU towards indigenization/self reliance;
- To assess the efficiency, effectiveness, objectivity and transparency in the procurement process; and
- To ascertain the effectiveness of post contract monitoring mechanism in MOD and Army HQ.

8.1.4 Audit Methodology

The audit was conducted by Director General of Audit (Defence Services) (DGADS) with co-opted audit team from Principal Director Commercial Audit& Ex Officio Member Audit Board (MAB), Bengaluru. DGADS conducted audit at Department of Defence Production and Acquisition Wing of the Ministry of Defence, concerned directorates (Dte) at Army HQ viz. Users Dte, Weapons and Equipment (WE) Dte, Financial Panning (FP) Dte, Quality Assurance Dte and MAB, Bengaluru audited the selected four[60] DPSUs. The audit was commenced in April 2015 and completed in August

[60]Four DPSUs selected in audit were: 1. HAL, 2. BEML, 3. BDL and 4. BEL.

2015. The findings were suitably updated up to December 2015, based on the replies furnished by Army HQ.

8.1.5 Audit Findings

Management of contracts is processed in two stages *viz*. pre-contract stage and post contract stage. In audit we examined the management of post contracts with DPSUs and observed that there was inordinate delay in execution at various stages by the DPSUs. The present status regarding supplies made by four DPSUs against 18 contracts vis-à-vis their Probable Dates of Completion (PDCs) and payment made till 31st July 2015 is shown in the **Annexure XI**.

We observed that in nine out of the 18 selected contracts, the supplies had been completed or almost in the process of completion, though after a delay ranging from 19 to 48 months. In the remaining nine contracts, which were of high value (₹24,459 crore) and meant for modernisation or capability enhancement of the Army, the supplies had either not commenced at all or were in the very initial stages. We examined the latter set of nine contracts in details and found that though in two contracts (Akash Missiles and Schilka Gun) the supply was commenced, yet there was a delay of more than two years and the completion, as per the approved delivery schedule, would take at least another four to five years. In remaining seven contracts, even the revised delivery schedule had not been finalised as of July 2015. This delay was despite the fact that advance payment to the tune of ₹4,067.78 crore and subsequent payments of ₹6,173.41crore was made up to 31st July 2015 as per provisions of the contracts. Thus, despite making payment of ₹10,241.19 crore constituting 42 *per cent* of total value of the contracts, tangible supply against nine contracts did not materialize. We analysed these nine contracts and found the following major reasons for delay:

- non freezing of user requirement before conclusion of contract- (ALH-WSI, AKASH)
- placement of supply order/contract before completion of development/modification project- (ALH-WSI, SBS)
- delay in offer of pilot sample, i.e. First Off Production Model (FOPM) for accord of Bulk Production Clearance (BPC)- (AKASH, SCHILKA, BSS, SBS)
- delay in successful evaluation of FOPM, repeated numerous quality issues in product supplied- (SCHILKA, TST for Ku-Band, STSU)
- heavy dependence of DPSU on foreign vendors/local sub-vendors- (ALH-WSI, AKASH, SCHILKA)
- ambiguity in contractual terms-(ARV, BSS, CIDSS)
- non supply of Buyer Furnished Equipment (BFE) vehicles timely by Army-(BSS, TST for Ku Band)

The detailed analysis of delay as well as impact of delay is discussed in subsequent paragraphs:-

8.1.5.1 Procurement of Advanced Light Helicopter (ALH) - Weapon System Integrated (WSI)

Army planned to raise six Army Aviation Squadrons (three each in XI and XII Plan) each equipped with 10 ALH-WSI to carry out combat support and anti armour role and to provide close air support to Armoured and Mechanized Forces in mobile warfare including counter insurgency operations in the North-East.

To meet the requirement of Army, Ministry of Defence (MOD) concluded a contract with M/s HAL in December 2007 for supply of 60 ALH-WSI at a total cost of ₹6,295.54 crore. As per the contract;

- Delivery of 20 ALH-WSI was to be made from 2009-10 to 2011-12 (during XI Army Plan) and 40 ALH-WSI was to be made from 2012-13 to 2015-16 (during XII Army Plan). This was however subject to certification of the Shakti engine (under development) by August 2008. In the event of any change in certification of Shakti engine by planned date, delivery schedule would get modified correspondingly.

- ALH-WSI would deem to have been delivered from the date of certification by the Buyer's Inspector and acceptance by Board of Officers (completion of ferry to intended location).

- The advance/progressive payment for ALH-WSI to be delivered during XI Plan was to be made first and advance/progressive payment for deliveries during XII Plan was to be made 18 months prior to commencement of the Plan *i.e.* on 1st October 2010.

We observed that the HAL did not supply a single helicopter during XI plan (up to March 2012).While 17 ALH-WSI were supplied between March 2013 and June 2015,the same were not accepted by the Army (October 2015) citing repeated snags/deficiencies. Failure in timely supplies was despite an advance and progressive payment of ₹3,550.85 crore made to HAL between December 2007 and July 2015, which included an advance payment for the helicopters to be supplied during XII Plan. We further observed that payment made in terms of the contract, for 20 equipment to be delivered during XI Plan worked out to ₹1,916.27 crore. Hence the payment of ₹1,634.58 crore against supplies to be made during the XII Plan was made in the period when even supply relating to the XI Plan period had not commenced. This was against the spirit of the payment terms of the contract, which implied that advance for the 40 ALHs to be delivered during the XII plan, was to be paid only after satisfactory adherence to the delivery schedule for XI plan by HAL. Advance payment for deliveries scheduled for the XII Plan period made in October 2010 becomes more critical in the light of the fact that even the engine (Shakti) of the aircraft had not been certified by that time.

Reasons for delay

Scrutiny of records revealed that following were the main reasons for delay:

(a) Delay in development of Shakti Engine,

(b) Delay in development of WSI version of ALH, *i.e.* Mark IV and

(c) Prolonged procedure of acceptance by Army.

(a) Delay in Development of Shakti engine: HAL signed an MOU with OEM (Turbomeca, France) in August 2000 for co-development of high powered engine named Shakti to be used in ALH by December 2006. Shakti Engine developed by HAL did not meet operational requirement (February 2007), particularly in cold/hot climate at high altitude. Consequent redesign of the engine resulted in delay in certification which was finally done in October 2010, after a delay of 46 months.

(b) Development of ALH-WSI: Cabinet Committee on Security (CCS) in 1998 sanctioned development of ALH-WSI by HAL at a cost of ₹433.02 crore. The same was revised in July 2005 to cater for additional requirements of mission equipment, *viz*. Anti Tank Guided Missile (ATGM) and Sighting System, at the revised cost of ₹600.16 crore for completion in 36 months. Sanction also provided for constitution of a Steering Committee to monitor the progress of the project. As the development was not completed within the 36 months, in the 10^{th} Steering Committee Meeting (August 2008), it was decided to split the WSI project in two phases *i.e.* phase-I where Qualitative Requirements (QRs) of weapons and systems were already identified[61] and Phase-II where QRs of weapons and systems were yet to be identified[62]. It was further decided that PDC for Phase-I would be July 2010 and a separate proposal for Phase-II would be submitted by HAL once the QRs of weapons identified by Services.

However, development of Phase-I of the project was delayed and extensions were granted up to September 2014 with additional amount of ₹12.42 crore. Initial Operational Clearance (IOC) for ALH WSI was accorded by Centre for Military Airworthiness Certification[63] (CEMILAC) in February 2013. Final Operational Clearance (FOC) had not yet (July 2015) been accorded.

[61]Phase I - 20 mm Turret Gun, 70 mm rocket, Air to Air Missile, sighting system, Helmet Pointing System (HPS), EW suite, Flare & Chaff Dispenser, Digital Video Recording system and Armour panels.

[62] Phase II - Anti Tank Guided Missile (ATGM), data Link, IR Jammer, Nuclear Biological & Chemical Sensors and Obstacle Avoidance System/Wire Cutter.

[63]CEMILAC – Centre for Military Airworthiness and Certification is an agency which clears the ongoing Military aircraft projects, products and components for flight safety.

We observed that the delay in completion of the development project was mainly due to delay in placement of orders by HAL on sub vendors, repeated requirement of certification, delay in availability of indigenous NAG missile from Defence Research and Development Laboratory (DRDL) and sighting system from Instruments Research and Development Establishment (IRDE). Further, since QRs of weapons envisaged for Phase II were yet to be finalised (July 2015), the phase II would be delayed considerably.

(c) Delay in acceptance of delivered ALH-WSI despite certification: As per the terms of the contract, after certification by buyer's inspector *i.e.* Customer Resident Inspector (CRI) at production site, acceptance of helicopters would be carried out by a Board of Officers (BoO) constituted by the Army for ferry out to consignee location. Upon satisfactory completion of physical inspection and verification of all documents related to tests, CRI issues Signal-out Certificate. Subsequently, Army HQ informs the concerned squadron to collect the helicopters which in turn constituted a BoO on case to case basis to accept each helicopter. As stated by HAL, while helicopters are produced in batches and offered for acceptance, the BoO takes up the acceptance of helicopter one by one, which takes time.

We observed that such condition of subjecting the CRI inspected helicopter to verification by a BoO, was not in other contracts with HAL for supply of ALH to the Services.

Impact of delay

- The delay in supply of ALH-WSI had affected the raising plan of 06 Army Aviation Squadron thereby compromising the operational capabilities of the ground forces

- One Army Aviation Squadron ALH WSI unit raised in 2013 with 509 personnel and authorization of 13 ALH WSI was not holding any fleet even after three years of its raising (March 2016).

- Advance payment to the tune of ₹1,634.58 crore for deliveries relating to the XII Plan was made to HAL against the spirit of the terms of the contract involving loss of interest worth ₹670.07 crore to the Government.

8.1.5.2 Procurement of Armoured Recovery Vehicles (ARVs)

Armoured Recovery Vehicles (ARVs) are authorised to Mechanised Forces in Army to provide repair and recovery support to disabled Combat Vehicles such as Tanks, Trawls, Bridge Laying Tanks (BLTs), Air Defence Platform, *etc*. during field operations. Against total authorised quantity of 1,030, Army was holding 826 ARVs of different types and vintages (October 2011). Of these, 352 ARVs were of latest vintage *i.e.* WZT-3 class and were procured from BEML in phases between March 1999 and March 2004. The ARV WZT-3 is meant for recovery of Combat Vehicles based on Tank T-72 chasis.

To meet the deficiency of 204 ARVs (1,030 - 826), MOD concluded a contract with BEML in October 2011 with minimum 30 *per cent* indigenous content at a total cost of ₹1,400.85 crore. An advance payment of ₹280.17 crore was made to BEML in December 2011.

As per the contract, BEML was to commence the delivery of the ARVs in August 2012 and to complete within 36 months of signing of contract *i.e.*by October 2014. However supply could not commence so far (July 2015).

Reasons for delay

Subsequent to signing of contract, BEML entered into a contract in January 2012 with a foreign firm *i.e.*M/s Bumar sp. z.o.o., Poland (BUMAR) for first eight ARVs in Fully Formed (FF) and remaining 196 in Semi Knocked Down/Completely Knocked Down (SKD/CKDs) conditions enabling BEML to effectively indigenise 35.44 *per cent* on an average. However on the insistence of Department of Defence Production (DDP) for 30 *per cent* indigenisation from the very first ARV, BEML got the contract amended with BUMAR in February 2012 wherein the BUMAR agreed for 30 *per cent* indigenisation from the first ARV with average indigenisation level unchanged at 35.44 *per cent*.

After signing the amendment, Board of company of BUMAR underwent changes in May 2012 and new management declined in August 2012 to execute the amended contract. Subsequently on the directions of DDP(September 2012) to resolve the issues, BEML discussed the same with BUMAR. During discussions it emerged that BUMAR did not own all intellectual property rights and was not entitled to provide the transfer of technology to BEML. Therefore, BEML had to approach another Polish company *i.e* Bumar Labedy, which was the Original Equipment Manufacturer (OEM) and competent to transfer the technology. Resultantly, BEML requested Army HQ (January 2014) for approval in extension of delivery period (42 months from issue of amendment) along with retention of Exchange Rate Variation[64] (ERV) clause for extended delivery schedule and waiver of liquidated damages (LDs).Army HQ submitted (February 2014) the proposal of BEML to MOD (Acquisition wing) for approval. The proposal of BEML was not accepted by MOD (July 2015) and asked BEML to honour the contract for supply of 204 ARVs on existing terms *i.e.* with imposition of LD for delayed supply and without ERV benefits failing which the contract may lead to termination. No further progress against the contract had been made till date (September 2015).

[64] ERV clause is applicable to Indian vendors to protect them from impact of variation in Foreign Exchange rate. ERV clause is applicable during original delivery schedule of the contract as per Defence Procurement Procedure

We observed that

- ❖ As Army was holding 826 ARVs against total authorised quantity of 1,030, with the current procurement of 204 ARVs there was no further requirement of this type of ARVs which are based on a chassis similar to T-72 chassis. Without future requirement of ARVs, decision to procure it with minimum 30 *per cent* indigenisation from the first vehicle was unwarranted, which ultimately led to non execution of the contract.

- ❖ BEML signed the contract with BUMAR which was not the Original Equipment Manufacturer (OEM) and hence was not competent to transfer the technology to BEML for indigenisation. Thus BEML's failure to sign the contract initially with OEM had made them unable to honour the contract for supply of ARVs.

- ❖ Advance payment of ₹280.17 crore was made to BEML in December 2011 against which no progress towards supply of ARVs was made by BEML. As of July 2015, BEML has not even finalised the contract with OEM for Transfer of Technology, which was the first stage to meet its contractual obligation towards MoD. Therefore, the advance of ₹280.17 crore was lying with BEML resulting in loss of interest of ₹138.68 crore as of July 2015.

8.1.5.3 Procurement of AKASH Weapon System

The AKASH Missile System is a supersonic, surface-to-air Missile (SAM) system developed by DRDO with the capability to engage a wide variety of aerial threats up to a maximum range of 25 km. The system has a multi directional and multi target engagement capability.

Due to increased severity and lethality of the Air Threat scenario, the existing L-70 gun system of 1960's vintage is unable to provide the requisite Air Defence, therefore, the requirement of induction of Missile Systems was felt. Defence Acquisition Council (DAC) accorded Acceptance of Necessity (AON) in June 2010, for procurement of AKASH systems for two Regiments during XI and XII plans. Accordingly, a contract was concluded with M/s BDL in March 2011 at a total cost of ₹14,180.46 crore which inter-alia included deliverables as shown in **Table-20** below along with their supply status as of July 2015:-

Table-20: Details of deliverables with PDCs and delivery status of Akash Weapon System

Sl. No.	Items	Nos.	Total value (in ₹ Crore)	Year-wise PDC as per contract and Qty in bracket	Supply status (July 2015)
1.	Missiles	2,040	8,156.93	2013-14 (152) 2014-15 (242) 2015-16 (436) 2016-17 (462) 2017-18 (540) 2018-19 (208) Total (2040)	32 50
2.	Ground Support Equipment (GSE)	332(28 types)	3,387.50	March 2013 (33) May 2015 (149) Dec 2016 (150)	21 49
3.	Infrastructure	22 missile storage buildings 3 missile preparation buildings and other equipment	548.81	June 2013 (1/3[65] portion) June 2015 (1/3 portion) March2017 (1/3 portion)	NIL
4.	Spares and Special Tools	NA	1,150.93	For 1st Regiment by June 2015 For 2nd Regiment by December 2016	NIL
5.	Trainingincluding Literature and Aggregates	NA	338.63	NA	NIL
6.	GPS& Lashing Equipment	2 sets each	5.00	NA	NIL
7.	Army Specific Validation	NA	160.98	1st April 2011 to 31st March 2013	January 2015
8.	Installation&Commissioning	NA	359.68	1st Regiment- July to December 2015 2nd Regiment- January to December 2017	NIL
9.	Project Support	NA	72.00	Up to 31st December 2016	NIL
	Total		**14,180.46**		

[65]The infrastructure for missile storage was to be created in phases i.e. one third by June 2013, two third by June 2015 and complete by March 2017.

Since the contract was concluded as repeat order of Air Force contract for two Squadrons of Akash Missile System signed in December 2008, limited validation for Army specific requirement on First Off Production Model (FOPM) was to be carried out and as per the contract supply of missiles was to commence after completion of trials on FOPM.

Audit examination revealed that stipulated delivery schedule of the contract was not adhered to despite payment of ₹5,761.11 crore (July 2015). As per contract, validation of FOPM was to be completed by March 2013, however, the same was completed after a delay of nearly two years due to delay in finalization of design and QRs by Army as well as delay by BDL in supply of GSEs. The FOPM was completed in January 2015. Further, 394 missiles were to be supplied by March 2015, whereas only 82 missiles were supplied up to July 2015.As against 182 types of GSE to be supplied by May 2015, only 70 types of GSE were supplied up to July 2015. No infrastructure and spares & tools had been handed over till July 2015.

Reasons for delay

While analyzing the reasons for delay, the following emerged:-

- After conclusion of the contract, Army had changed the design of certain Ground Support Equipment (Troop control centre, Tactical Satellite Terminal, *etc.*) in June 2012 as compared to those for Air Force.

- BDL could not arrange supply of components for Mobile mast, from sub-vendors in time.

- Certain sub-systems, such as Transmitter, Receiver, Advance Land Navigation System, Signal Data Processor, *etc*. offered by BDL for testing did not meet the user's requirement and hence subsequent modification by BDL and testing by users had to be carried out.

- When FOPM was ready for validation (February 2014), BDL could not ensure timely availability of air targets and other infrastructure.

We observed that:

❖ Despite making payment of significant amount of ₹5,761.11 crore, which constitute 40.63 *per cent* of total value of the contract, the supply of the weapon system had been considerably delayed. As a result, Army was constrained to continue with the four decade old L-70 Gun for Air Defence and thus remained unprepared against the ever increasing air threat scenario.

❖ Initial advance of ₹2,836.09 crore was paid in March 2011. Due to delay in FOPM validation (34 months) and infrastructure (25 months till July 2015), Government incurred a loss of ₹1,073.69 crore towards interest.

8.1.5.4 Procurement of Sarvatra Bridge Systems (SBS)

Sarvatra Bridge System (SBS) is a multi-span assault bridge system to be used by Combat Engineers of Army for negotiation of obstacle such as canals, ditches, dry gaps *etc*. by heavy Army vehicles like tanks in a very short time. In order to replace the ageing AM-50 bridges imported from Czechoslavakia during 1978 to 1987, the bridge system was developed by DRDO (Research & Development Establishment (Engineers), Pune) in collaboration with other industrial partners and five SBS of Limited Series Production (LSP) were delivered to Army by June 2004 at a cost of ₹85.43 crore.

During development stage and production of LSP bridges, L&T was the major partner having technology of superstructure, launching mechanism and integration of SBS while exposure of BEML was confined only to supply of Tatra vehicle on which the bridge was integrated. Based on infrastructure required for such an intricate system, initial lead time and cost implication, DRDO recommended (2004) L&T as nodal production agency for the SBS.

However, in March 2005, Department of Defence Production (DDP) nominated BEML as nodal production agency despite knowing the fact that BEML in turn would be dependent on L&T for major components of SBS. During exploitation in the field, bridges supplied against LSP orders developed defects with respect to lateral stability and other crucial aspects. In March 2006, it was decided to incorporate modications in the design of the bridge. One bridge was modified by BEML without cost and offered for trials. After completion of user trials of one modified bridge in February 2009, a contract for modification of remaining four bridges was signed with BEML in July 2010 at a total cost of ₹12.28crore.

Further, in order to complete the de-induction of AM 50 bridges by the year 2018-19, AON for 22 SBS was accorded in August 2010 as Single vendor from BEML. Accordingly, a contract was concluded in March 2012 with BEML at a total cost of ₹573.98 crore and an advance payment of ₹86.10 crore was made (March 2012) to BEML.As per the contract, first (pilot) bridge was to be offered for Bulk Production Clearance (BPC) within 400 days of signing of contract *i.e.* by 29 April 2013 and complete the delivery of balance 21bridges within three and half years of BPC. However, BEML had not yet (July 2015) delivered the pilot bridge. BEML requested (June 2015) MOD for extension of delivery of the pilot sample up to November 2015 and delivery of remaining 21 sets within three and half years of BPC, which was under consideration at MOD (August 2015).

Reasons for delay

We analysed the reasons for delay as under:-

BEML could not proceed with the manufacturing of pilot bridge as modified LSP bridges offered for inspection developed defects (March-April 2012) in hinges and nut of pier legs due to their metallurgy, which may result in accident and collapse of the bridge. Consequently, to find out the root causes of defects, DRDO constituted Failure Analysis Board in August 2012, which recommended (April 2014) suitable change in the metallurgy. However, DRDO, in October 2012, communicated BEML to go ahead with production of pilot bridge less hinges and pier legs. In October 2012 BEML approached its major partner (L&T) for production of pilot SBS, who expressed their inability to meet the timeline of pilot sample by April 2013 citing reasons of long lead period required for aluminium used in the bridge and also 200 days had already elapsed by that time. However, BEML placed orders on co-partners only between September 2013 and November 2013.Thus, delay of one year occurred due to their own issues with co-partner. Despite clearance from DRDO, BEML put the production activity of pilot bridge on hold on the pretext of uncertainty of materials to be used in hinges and pier nuts. This is not acceptable as these were just two *per cent* of total scope of work and the same could have been integrated in the bridge in the last stage as clarified by DRDO.

We observed that:-

❖ Despite advance payment of ₹86.10 crore to BEML in March 2012, BEML did not take any action towards delivery of pilot bridge by the due date (April 2013). As a result, MOD suffered a loss of interest of ₹12.59 crore on advance paid.

❖ Procurement of 22 SBS was against the ageing AM-50 bridges held with Combat Engineers and were planned to be phased out by 2017. Army reiterated (October 2012) that because of restricted spares available for AM-50 bridges, retention of these bridges beyond 2017 would have severe implication on bridging capability of Combat Engineers. Thus inordinate delay in delivery of SBS would adversely affect operational capability of Corps of Engineers.

8.1.5.5 Up-gradation of Schilka Weapon System

Schilka weapon system is an all weather automotive self propelled air defence gun system of 1960s technology vintage held in Indian Army, which were imported from Russia in 1973(30 numbers) and in 1983 (60 numbers). It was assessed in December 1997 to upgrade Schilka, as the existing system had obsolescent electronics[66], however, the armament and automotive systems were in satisfactory working condition and could match contemporary systems after overhaul and limited up-gradation. Hence, it was considered that after an overhaul and a limited up-gradation, the system could be used for another 15 years. In 2000 Army HQ decided to upgrade only 48 Schilka and de-induct the balance from 2015-16.

To upgrade these 48 Schilka, Request for Proposal (RFP) was issued to many vendors, of which M/s BEL emerged as single vendor, which was approved by RM in August 2005. One Schilka Mount was handed over to BEL in October 2005 for developing a prototype. BEL was to provide prototype for trials within six to eight weeks of handing over of Schilka Mount, however, it was delayed repeatedly. Finally trials were completed in 2009 and contract was concluded in March 2011 at a cost of ₹748.19 crore with PDC of 15 months for FOPM i.e by June 2012. On successful confirmatory trials of FOPM, the Bulk Production Clearance (BPC) was to be accorded and the supply to be completed within 42 months from the accord of BPC. The advance payment of ₹112.22 crore was made in March 2011.

The upgraded weapon system for FOPM trials was delayed as the same was offered by BEL only in May 2014. BPC was accorded by the Ministry in October 2014 and the supply would be completed progressively by April 2018 against October 2016. Up to July 2015, only four out of 48 Schilka amounts have been delivered by M/s BEL.

Reasons for delay

The main reason for delay was that before offering integrated FOPM for confirmatory trials, DGQA evaluation at sub-system level was to be carried out. However, M/s BEL could not offer sub-systems for evaluation within the stipulated date. BEL was dependent on foreign vendors in eight out of 24 major sub-systems. The supply of sub systems by foreign vendor was delayed, resultantly BEL could not offer the sub system for DGQA evaluation.

We observed the impact of delay as under:-

- An advance of ₹112.22 crore was paid in March 2011 to BEL, whereas the delivery of first Schilka amount was made in November 2014. In the absence of suitable provision in the contract regarding interest on unutilized portion of advance, there was a loss of ₹36.61crore by way of interest on advance paid, besides delay in supply.

[66] Outdated electronics such as outdated moving target indicator, ineffective electronic counter measures, inadequate primary power supply unit, inadequate spares, *etc*.

- The up-gradation project, conceived during 1997-98, was not yet (July 2015) fully achieved, which indicates that the key objective of DPP, *viz*. expeditious procurement and achievement of self-reliance, had been defeated to a large extent.

- As per Article 10 of the Contract, all the 48 Schilka mounts would be delivered within 42 months from the date of BPC. However, the quantum of delivery per year was not stipulated in the contract. Non-indication of rate of delivery provided a lee-way to BEL to supply according to their own convenience.

- The Army Air Defence will have to use old version of Schilka which was due for de-induction in 2015-16, till its up-gradation by 2018.

8.1.5.6 Procurement for Phase II of Battlefield Surveillance System (BSS) – SANJAY and Command Information and Decision Support System (CIDSS) - SAMVAHAK

The two projects– Battlefield Surveillance System (BSS) and Command Information and Decision Support System (CIDSS) are components of automation project of Command, Control, Communication and Intelligence (C3I) System in Army. Automated C3I would increase the timeliness and soundness of decisions in reduced response time compared to the manual system.

BSS is an array of sensors and information obtained from these sensors would be processed automatically and disseminated to appropriate command and weapon control system by CIDSS for requisite planning of operations/ counter measures of TacC3I[67] and to take appropriate decisions.

Project BSS was envisaged to be developed by M/s BEL in collaboration with Centre for Artificial Intelligence and Robotics (CAIR, DRDO Lab) in two phases, Phase I as Test Bed to carry out comprehensive testing and validation of the system and Phase II equipping all the Corps and Division of Indian Army. Supply Order for development of Phase I was placed on M/s BEL in August 2002 at a cost of ₹34.92 crore and the same was inducted by Army HQ in January 2008. AON for Phase II was accorded in November 2008 and Contract was concluded with M/s BEL in March 2011 at a cost of ₹2,539 crore. An advance of ₹345.89 crore was paid to M/s BEL in March 2011. As per the contract, First Off Production Model (FOPM) for validation in Plain/Desert and for High Altitude Areas were to be supplied within 12 and 18 months of the contract *i.e.* by March 2012 and September 2012 respectively. After successful completion of validation trials of FOPM, Bulk Production Clearance (BPC) were to be accorded and supply was to be completed within

[67]TacC3I is the project for automation of command, control, communication and intelligence system of Army to assist the commanders from Regimental/Battalion level to Corps level in assessment of field scenario and decision making in speedy and effective manner.

30 months of BPC. However, FOPM for both versions were yet to be offered for validation (July 2015).

Project CIDSS is to be completed in three phases, first two phases are test bed activities and third phase is operational stage. Sanction for Phase I was accorded by the Ministry in May 1999 at a total cost of ₹108.9 crore to be undertaken by BEL as a single vendor in Infantry units and formation of designated Corps *i.e.* 10 Corps and was completed in September 2007. AON for phase II was accorded by DAC in September 2008 as single vendor from BEL. Scope of phase II was extension of CIDSS to all arms of 10 Corps, integration with other components of Tac C3I, validation of application software and thereafter equipping one strike Corps. Contract for the phase II of the system was concluded with BEL in March 2011 at a total cost of ₹1,068.22 crore (₹905 crore pertain to BEL including maintenance of ₹188.59 crore, ₹60 crore pertain to DRDO and ₹103.22 crore as Buyer Furnished Equipment). An advance of ₹142.78 crore was paid to M/s BEL in March 2011. As per the contract, BEL was to deliver test bed part I comprising hardware deliverables, integration facility for Tac C3I lab and civil works within 12 months (March 2012) and part II comprising application software within 15 months (June 2012) from conclusion of the contract. The entire test bed activities including validation trials, approval of application software, factory acceptance test, installation and commission were to be completed within 30 months *i.e.* by September 2013. As of July 2015 delivery of test bed for validation was yet to be completed and delayed for over three years.

Reasons for delay

Scrutiny of the records revealed that while concluding the contracts, certain crucial issues like common Geographical Information System (GIS) for all components of Tac C3I system, timeline and scope for completion of software in different stages, methodology of software development, vetting and approval of hardware before procurement, *etc*. were not explicitly incorporated in the contract.

Subsequent to signing of contracts, (August 2011 to October 2011), Army directed BEL to get the specifications of hardware and software vetted by them before initiating procurement. During the review meetings the user sought common GIS between CIDSS and BSS and other changes in specification of software to which the vendor termed out of scope of the contract. User stated that BEL had misjudged the scope of both the contracts and delayed the development of software. Difference in interpretation of contracts led to arbitration from December 2012 to March 2013. Subsequently, it was decided (November 2013) to undertake progressive development and testing of application software based on mutually agreed philosophy of software development methodology. Resultantly, BEL sought for amendment in the contracts with cost escalation after fielding first FOPM of BSS and test bed evaluation of CIDSS which was agreed by the users.

As evident from above, ambiguity in contractual terms led to different interpretation by vendor and user which resulted in inordinate delay in execution.

As of July 2015, in-house testing of software development for BSS at BEL was completed and testing by user was to be commenced by September 2015. As per the contract, after completion of the Beta testing, software will be ported on the system for conduct of validation trials. However, to an audit query, Army stated (September 2015) that Buyer Furnished Vehicle *i.e.* TATRA 8x8 was not available due to ban in 2012, which would further delay the project.

Against an audit query (May 2014) on fresh timeline for development of software for CIDSS, Army stated (June 2014) that once the stabilized and integrated version of Build 1.0 was tested successfully by them in a network environment in SITF, timeline for Build 2.0 and 3.0 would be given. As of July 2015, testing of Build 1.0 in the SITF was yet to commence (July 2015).

We observed that:-

- ❖ Based on software intensive nature and requirement of integration of BSS and CIDSS with other component projects of TacC3I, contract for both the projects were concluded with BEL as single vendor. As discussed above, main reasons for delay in implementation of the project are common requirement for integration and development of application software. Thus, the very purpose of concluding all contracts for the projects TacC3I with BEL as single vendor was not achieved.

- ❖ Vice Chief of Army Staff directed to close all procurement cases for TATRA vehicles due to ongoing CBI enquiry in August 2012. However, Army could not place order for TATRA vehicles despite the fact that sufficient time (17 months) was available after signing of the contract in March 2011. As of September 2015 Army did not place order for BFE even though the ban on procurement of TATRA was lifted in November 2014.

- ❖ Inordinate delay in fielding of BSS & CIDSS would prolong the implementation of TacC3I. Further, their non-availability would hamper timeliness and soundness of decisions making in reduced response time during operation for more than eight years.

8.1.5.7 Procurement of KU-Band Transportable Satellite Terminals (TSTs)

Transportable Satellite Terminals (TSTs) are state of art communication equipment installed on lighter vehicles with smallest antenna which can be deployed within 30 minutes to one hour and provide reliable, continuous and secure communication to Army. At present the Strike Corps of Indian Army rely on Transportable Troop scatter Communication Terminals with larger size antennas and hence vulnerable to enemy air action. These Terminals were introduced in 1981 in Army, which became obsolete and were phased out in 2001.

To meet the urgent operational requirement of one Strike Corps Acceptance of Necessity(AON) for 40 TSTs (amended later to 30) was accorded in January 2005 under Fast Track Procedure (FTP) and a contract was concluded with M/s BEL in June 2009 for procurement of 30 Ku Band[68] TSTs at a total cost of ₹30.02 crore. As per contract, the delivery was to be completed within 12 months of conclusion of contract, inter-alia completing activities like, delivery of vehicles by Buyer, preparation of Acceptance Test Procedure by BEL and its approval by Signal Dte. On successful installation of TSTs in one Strike Corps, the same was planned to be installed in other Strike Corps.

As per the contract, vehicles for mounting the TSTs were to be provided by Buyer and BEL were to deliver 30 TSTs by June 2010. Components for TSTs worth ₹27.73 crore were supplied by BEL up to December 2011. Payment to the extent of ₹25.07 crore (85 *per cent* of total cost of contract) was made till December 2014. However, Army was yet to accept the TSTs as Acceptance Test Procedure (ATP) of the same was in progress (July 2015).

Reasons for delay

Scrutiny of records at Army HQ revealed that there was delay in ATP as the draft ATP document which was to be submitted by BEL in September 2009 (within three months of conclusion of contract) was actually submitted in August 2012and the same was approved by Signal Dte. in August 2014. Thereafter, BEL offered the TSTs for ATP in October 2014 but the same was not meeting the specifications of ATP. As such the ATP was not complete (December 2015).

We observed that:

- ❖ The time taken by BEL for submission of ATP document was around three years while compared the time prescribed in the contract, i.e. three months. Further, Army also took around two years to approve the ATP.
- ❖ The electronic hardware/components are bound to become obsolete in a short time. As most of the components of TSTs were procured prior to December 2011 and by the time TSTs would be installed, Army would be compelled to use an outdated technology.

[68] A microwave frequency band used for satellite communication

8.1.5.8 Procurement of Subscriber Terminal Secrecy Unit for Mobile Cellular Communication System (STSU for MCCS)

Mobile Cellular Communication System (MCCS) has been inducted in Army to improve communication in Mountains Formations deployed in counter insurgency/ counter terrorist operations. MCCS is based on technology which is commercially available in the market but do not have high grade encryption to provide sufficient security. Therefore, to provide end to end secrecy solution for communication, Army felt the requirement of an indigenously developed device called Subscriber Terminal Secrecy Unit (STSU) which is mobile handset/Fixed Wireless Terminals (FWT) with encryption software of high grade.

AON for STSUs for one MCCS Unit (Qty 5000) was accorded in November 2004 to be procured from Indian vendors and contract for the same was concluded with BEL in December 2010 at a cost of ₹10.77 crore. An advance of ₹93 lakh had been made to BEL in December 2010. As per the contract delivery of STSU was to be completed in six months i.e. by June 2011 subject to clearance from Scientific Analysis Group[69] (SAG) for secrecy level within two months from signing of contract. However, the same was yet to be delivered as SAG evaluation of equipment was still pending (July 2015).

Reasons for delay

Our scrutiny of records at Army HQ revealed following reasons for delay-

- M/s BEL offered the encrypted commercially off the shelf (COTS) handset to SAG initially in January 2011 for evaluation. However evaluation by SAG was not completed in two months as envisaged in the contract. Meanwhile, in November 2011 the handset under evaluation became obsolete. Subsequently, in August 2012, BEL offered another COTS handset for SAG evaluation, which too became obsolete by March 2014.

- In March 2014, BEL stated to Army that they were developing its own handset as the COTS handset got obsolete and the new handset would be submitted to SAG in April 2014 for evaluation. Army HQ stated (July 2015) that BEL's handset supplied in May 2015 was under evaluation and their supply depended on successful evaluation by SAG. Thus, from January 2011 to till date (July 2015) i.e. even after more than four years, STSUs were under SAG evaluation.

We observed that:

[69] SAG – Represented by DRDO which decides on cipher policy of defence equipment and evaluate and grade the security level.

- The SAG intimated in April 2011 that requisite security grading could not be more than Grade 2[70] as the STSU offered by BEL was a COTS item. Had BEL supplied indigenously developed STSU initially as per RFP, SAG would have cleared in the first instant itself.
- Till successful completion of SAG evaluation, the BPC could not be accorded and resultantly the STSU would not be available for MCCS.
- Despite payment of ₹93 lakh in December 2010, the MCCS unit is compelled to communicate in unsecure environment for more than four years. Further, due to delay in supply of the secure equipment, the availability of STSU to remaining MCCS units of Army would have to communicate in unsecure environment.

8.1.6. Monitoring Mechanism

Once a contract is signed effective monitoring and implementation of contract, which includes important aspects such as delivery, payments, inspection, utilization of the equipment amendment in contract *etc*. is required for timely execution of the contracts and for the user's satisfaction. We observed that the post contract management at Army HQ and their monitoring by Acquisition Wing and Department of Defence Production (DDP) in Ministry of Defence (MOD) was not effective as discussed below:

8.1.6.1 Post Contract Management (PCM) at Army HQ

Defence Acquisition Council (DAC) is set up for according 'in principle' approval of capital acquisition plan and also accords Acceptance of Necessity for each capital procurement case. Decisions of DAC for the same are to be implemented by Defence Procurement Board (DPB).To assist DPB in its functioning, there exist an acquisition wing in the MOD headed by Director General (DG) Acquisition, having an integrated set up with officers from Department of Defence, Finance and Service HQ. Defence Procurement Procedure, stipulate that while responsibility for contract administration and management rest with the Service HQ concerned (Army HQ), post contract monitoring would be conducted by the Acquisition Wing of the MOD. In February 2007, in order to streamline the procedure for monitoring, collegiate meeting attended by all concerned directorates of Army HQ was held and it was decided that Deputy Director General Procurement (DDG Proc) of Masters General of Ordnance (MGO) Branch would act as single point nodal agency in case of indigenous capital contract and files pertaining to post contract activities would be routed through them. In April 2012, Weapon and Equipment (WE) Directorate, the contracting agency in Army HQ, issued instructions with approval of Deputy Chief of Army Staff (P&S) to formalize the procedure for amendment to contract. According to that, any amendment

[70]Grade 2 – is accorded by SAG to those COTS items which provide a cover time of one week for confidential information.

to contract would be dealt by WE Directorate, and responsibility of post contract management rested with MGO Branch.

Audit found that the monitoring mechanism structure as stipulated above was not being adhered to by the DDG(Proc). To an audit query (July 2015) seeking details of all post contract activities, DDG (Proc) stated (August 2015) that they were involved only with processing the bills for payment to the vendor. Further, during examination of post contract activities at Acquisition wing in MOD, no document relating to post contract monitoring was produced. It was further noticed that, in agenda of DAC and DPB no issue of post contract management of capital contract is included. These facts evidently indicate that post contract management was not being adequately monitored.

8.1.6.2 Post Contract Management at Department of Defence Production

Department of Defence Production (DDP) deals with matters pertaining to defence production, indigenisation of imported stores, equipment and spares, planning and control of departmental production units of Ordnance Factory and of DPSUs. Secretary Defence Production is also a member of decision making bodies of capital acquisition *viz.* Defence Acquisition Council headed by RM and Defence Procurement Board headed by defence secretary. However, in capital acquisition process, DDP remains involved at the level of General Staff Qualitative Requirement (GSQR) approval, Acceptance of Necessity (AON) and in approval of Detailed Project Report, if applicable.

We noticed that there was no systematic mechanism in DDP to monitor the execution of capital contracts concluded with DPSUs. In response to audit query on procedure for monitoring the contracts concluded with DPSUs, DDP stated that they monitored the contracts based on information received from DPSUs through monthly DO letter, correspondence on Memorandum of Understanding (MOU) progress, etc. When Audit asked for list of capital contracts concluded with respective DPSUs during XI Plan, the same was not readily made available. Later on, the lists as obtained from the DPSUs were forwarded to us. Further, scrutiny of records revealed that DDP even do not have self mechanism to monitor PCM activities as there was no data base for capital contracts with DPSU nor any files maintained when contract is concluded. DDP comes into picture only when DPSUs or other departments refer the case to them.

Thus, post contract administration and management by Army HQ and their monitoring by Acquisition Wing was ineffective. Moreover, DDP do not take any systematic follow-up mechanism on all contracts with DPSU to ensure timely execution of contracts by DPSU.

8.1.7. Conclusion

The various Schemes initiated a decade ago to enhance operational preparedness of the Army could not be fructified till date (July 2015) even after conclusion of contracts with the DPSUs during XI Plan (2007-12) for procurement of equipment and making payment of ₹10,241.19 crore to them. Further Government had to suffer a loss of ₹1931.64 crore on account of accrued interest on amount paid in advance to the DPSUs as summarised below:

- Delay of 55 months in development and further delay in rectification of quality issues of ALH-WSI by HAL had created a situation where despite payment of ₹3,550.85 crore (56 *per cent*) not a single Helicopter was ferried out by July 2015. Moreover, the Government interest had not been safeguarded while framing payments terms in the contract as payment of ₹1,634.58 crore had to be made for deliverables for XII Plan even before completion of targets for XI Plan. The Government had to suffer a loss to the tune of ₹670.07 crore as interest on payment made (₹1,634.58 crore)

- Delay of 34 months in First Off Production Model (FOPM) and delay of 25 months in availability of infrastructure of Akash Missiles System from BDL, meant to replace four decade old L-70 Gun system not only have adverse impact on operational readiness but also have financial implications in terms of loss of interest of ₹1,073.69 crore.

- Due to heavy dependence on foreign vendor/co-partner, BEML could not commence supply of Armoured Recovery Vehicle (ARV WZT-3) even after a delay of 35 months. Further, BEML could not offer FOPM of Sarvatra Bridge System after a delay of 27 months. Resultantly, operational preparedness of Army was adversely affected and also there was a burden on Government exchequer by way of loss of interest of ₹138.68 crore accrued on unutilized advance.

- BEL offered FOPM of up-graded Schilka Gun with a delay of 23 months, as BEL had imported 36 *per cent* of components from foreign vendors, which got delayed. Resultantly, there was a loss of ₹36.61 crore on account of interest on advance paid to them. As such, Army Air Defence would be using the Schilka Gun till availability of upgraded one which was otherwise due for de-induction.

- Inordinate delay of 40 months in fielding of Battlefield Surveillance System and Command Information Decision Support System, (part of automation project *viz*. TacC3I of Army) by BEL would hamper timeliness and soundness of decisions making in reduced response time in battlefield.

- Despite delay of more than four years, BEL could not develop communication equipments *viz*. Transportable Satellite Terminals for KU-band and Subscriber Terminal Secrecy Unit for Mobile Cellular Communication System, meant for usage by field units and which are essential during operations.

Recommendations

- All advance payments should indicate the purpose and time by which payments be used and followed up by an utilisation certificate jointly from the DPSU and the User. A clause for recovery of penal interest on the amount not utilized for the desired purpose within the stipulated time is introduced.
- Since contractual obligations of the DPSU commence with the execution of the agreement, which is also followed up by payment of advance, liquidated damages be charged from the effective date of contract instead of bulk production clearance.
- Contracts involving design and development should be concluded only after qualitative requirements of Users are frozen.
- Effective monitoring in MOD as well as at Army HQ may be ensured to facilitate expeditious supply against high money value capital contracts.

The case was referred to the Ministry in January 2016; their reply was awaited (March 2016).

Mishra Dhatu Nigam Limited, Hyderabad

8.2 Avoidable loss due to non-availing of Customs Duty Exemption

Delay in preferring claim for reimbursement of Customs Duty paid led to avoidable extra expenditure of ₹ 1.30 crore

Mishra Dhatu Nigam Limited, Hyderabad (Company) entered (January 2011) into a contract with Vikram Sarabhai Space Centre, Thiruvananthapuram (VSSC) for manufacture and supply of Columbium Alloy C103 sheets (135 Nos./1445 Kgs) at a total cost of ₹11.30 crore. The Material Procurement Cell (MPC) of the Company placed purchase orders on M/s Zhozhou Cemented Carbidde Works Import & Export Company Limited, China for supply of 3000 Kgs of Niobium (April 2011) and on M/s ABS Industrial Resources Limited, United Kingdom for supply of 400 Kgs of Hafnium (September 2011). Niobium and Hafnium were received in September 2011 and December 2011 respectively.

The contract provided that the Purchaser (VSSC) was eligible for availing customs duty exemption and the contractor (Company) could avail the exemption against the required certificate issued by the Purchaser on demand. The Company did not initiate action to obtain Customs Duty Exemption Certificate (CDEC) from VSSC either on placement of order or on receipt of goods to ensure that goods were cleared by availing exemption.

The Company cleared the materials after paying ₹89.33 lakh and ₹40.92 lakh towards customs duty. The action of the Company in clearing the goods on payment of duty was not prudent as the Company should have availed exemption instead of resorting to *pay first and claim refund later*.

Audit observed that the Company requested VSSC to issue CDEC only in December 2012 for both the purchase orders which was one year after the payment of customs duty for the last material received. The CDEC was received from VSSC in January 2013.

The claim for refund of customs duty paid was filed by the Company in March 2013 after a period of 18 months/15 months from the date of payment of duty (September 2011/December 2011). Sec 27 (1) of Customs Act, 1962 stipulated a period of one year (in the case of import for personal use or by government or by any educational, research or charitable institution) and six months in other cases for filing of application for refund. The claim was returned by the Customs Department on the ground that the assessment order had become final and the claim was time barred.

Company admitted (December 2015) that payment of customs duty and consequent rejection of refund could have been avoided with proper communication between the departments involved. It also stated that it was the first time that availment of customs duty exemption was provided in a VSSC contract and shift in modality of raw material procurement with customs duty payment to availment of customs duty exemption could have contributed to the lapse in the system.

The reply is not tenable since the Company was aware of the conditions of the contract as well as time limit in the Customs Act for claiming of refund and thus, should have taken measures to ensure that there was no loss to the Company.

Thus, failure to avail exemption and resorting to pay first and claim refund later which was unsuccessful resulted in avoidable extra expenditure of ₹1.30 crore.

(PARAG PRAKASH)
Director General of Audit
Defence Services

New Delhi
Date: 31 May 2016

Countersigned

(SHASHI KANT SHARMA)
Comptroller and Auditor General of India

New Delhi
Date: 31 May 2016

ANNEXURE-I

(Referred to in Paragraph 1.11)

Position of outstanding ATNs

Ministry of Defence - excluding Ordnance Factory Board

(i) Pending for more than ten years

Sl.No.	Report No. and Year	Para No.	Subject
1.	No. 2 of 1989	11**	Purchase and licence production of 155mm towed gun system and ammunition
2.	No.12 of 1990	9**	Contract with Bofors for (a) purchase and licence production of 155mm gun system and (b) Counter Trade
3.	No.8 of 1991	13*	Central Ordnance Depot, Agra.
4.	No.8 of 1993	29*	Import of mountaineering equipment and sports items
5.		31*	Avoidable payment of detention charges
6.	No. 7 of 1998	32*	Infructuous expenditure on procurement of substandard cylinders
7.	No. 7 of 2001	15**	Procurement of an incomplete equipment
8.	PA Report No. 7A of 2001	@Entire Report (ATN for 8 out of 42 paras yet to be received even for the 1st time)	Review of Procurement for OP VIJAY(Army)
9.	No. 6 of 2003	14*	Irregular recruitment of personnel
10.	No. 6 of 2004	3.2*	Recoveries/Savings at the instance of Audit.
11.	No. 6 of 2005	3.2*	Recoveries/savings at the instance of Audit
(ii)	**Pending more than 5 years upto 10 years**		
12.	Report No. 4 of 2007	3.3**	Unauthorised use of Defence assets and public fund for running educational institutes
13.		3.5*	Recoveries/savings at the instance of Audit

Sl.No.	Report No. and Year	Para No.	Subject
14.	PA Report No. PA 4 of 2008	Chapter I**	Supply Chain Management of General Stores and Clothing in the Army
15.	Report No. CA 17 of 2008-09	2.7*	Non-renewal of lease of land occupied by Army Golf Club
16.		3.4*	Unauthorized use of A-1 Defence land by Army Welfare Education Society
17.		3.5*	Utilisation of Government assets for non-governmental purposes
(iii)	**Pending more than 3 years upto 5 years**		
18.	Report No. 12 of 2010-11	2.1**	Defective import of SMERCH Multi Barrel Rocket Launcher System
19.		3.6*	Recoveries and savings at the instance of Audit
20.	PA Report No. 6 of 2010-11	Standalone Report***	Supply Chain Management of Rations in Indian Army
21.	PA Report No. 14 of 2010-11	Standalone Report*	Canteen Stores Department
22.	PA Report No. 35 of 2010-11	Standalone Report*	Defence Estates Management
23.	PA Report No. 11 of 2011-12	Entire Report*	Special report on Adarsh Co-operative Housing Society, Mumbai
24.	Report No. 24 of 2011-12	3.1**	Extra expenditure due to acceptance of higher rates
25.		3.14*	Recoveries and savings at the instance of Audit
26.		5.2**	Non-completion of bridge after twelve years of sanction
(iv) Pending upto 3 years			
27.	Report No.16 of 2012-13	2.1*	Loss of revenue on renewal of lease of Government land
28.		3.1**	Unauthorised use of defence assets and manpower for the benefit of Army Welfare Education Society
29.	PA Report No. 18 of 2012-13	Entire Report**	Performance Audit of the Medical Establishments in Defence Services
30.	Report No. 30 of 2013	2.1*	Improper management of Defence land

Sl.No.	Report No. and Year	Para No.	Subject
31.		2.3**	Non introduction of Air Conditioners in Tanks
32.		2.5*	Absence of effective controls resulting in non recovery of outstanding dues
33.		3.6**	Unauthorised use of Defence accommodation
34.		3.7*	Recoveries, savings and adjustment in accounts at the instance of Audit
35.		4.4*	Inadmissible payment of escalation charges to the contractors
36.	Report No. 35 of 2014	2.1***	Inordinate delay in indigenisation of TATRA vehicles
37.		2.2***	Procurement of unacceptable equipment valuing ₹27.32 crore
38.		2.3***	Loss of revenue due to unauthorised use of Defence land by United Services Club, Mumbai
39.		2.4**	Irregular construction on Defence leased land
40.		2.6***	Unfruitful expenditure on payment of bandwidth charges by Canteen Stores Department
41.		3.1***	Nugatory expenditure of ₹88.39 crore in the procurement of Chemical, Biological, Radiological and Nuclear (CBRN) Equipment
42.		3.2*	Extra expenditure of ₹2.33 crore due to failure to accept the tender for procurement of tea within the validity period
43.		3.3***	Loss of revenue due to non collection of metal scrap from Field Firing Range
44.		3.6**	Recoveries, savings and adjustment in accounts at the instance of Audit
45.		4.1**	Avoidable expenditure on construction of excess dwelling units
46.		4.2**	Inordinate delay in handing over the clear site to the contractor resulted in avoidable payment of escalation charges

Sl.No.	Report No. and Year	Para No.	Subject
47.		4.3**	Selection of improper site resulted in foreclosure of work after an expenditure of ₹5.49 crore
48.		5.2***	Construction of a bridge without sub-soil investigation resulted in loss of ₹0.75 crore
49.		7*	Defence Grants-in-Aid Scheme of Defence Research and Development Organization
50.	PA Report No. 19 of 2015	Entire Report***	Performance Audit on Ammunition Management in Army

* **ATNs examined by Audit but yet to be revised by the Ministry in the light of Audit remarks – 23**

** **ATNs vetted by Audit but finalized ATNs are awaited from Ministry – 17**

*** **Action Taken Notes not received even for the first time - 09**

@ **Part ATN received – 01**

ANNEXURE-II

(Referred to in Paragraph 2.1.2)

Directorates of DGR and their responsibilities

S No	Directorate	Responsibility
1	DRZs	Inspection of Security Agencies, ESM Coal transportation companies and training institutes conducting DGR resettlement courses in its jurisdiction and provide feedback to DGR. Liaise with PSUs and others for taking security cover from DGR empanelled Security agencies. Approve Training institutes identified and recommended by the Rajya Sainik Boards (RSBs) for training of ESM and dependents.
2	Training	Planning, conduct and monitoring of training courses for retiring / retired Armed Forces personnel for their resettlement in civil life.
3	Employment	Render assistance in getting employment to released or retired regular officers and to the next of kin of officers who were killed in action or died in service
4	Self Employment	Provide consultancy and guidance in establishing small / cottage / rural / household industries / small business enterprises through allotment of agencies / dealership / stockistships of selected public and private sector undertakings and retail outlets / vendor stalls of commodities
5	Entrepreneur & Loans (E&L Dte)	The role of E&L Dte. of DGR with regard to Entrepreneurship schemes of the Govt and private sectors is limited to publicity and guidance of interested ESM.
6	Statistics & Records	Collection of bio-data of ESM and retiring servicemen through Zila Sainik Boards and Record Offices with a view to registering their names for employment assistance
7	Publicity	Dissemination, among defence service personnel and ESM, information regarding concessions and facilities provided to ESM by Central and State Govt. PSUs, local bodies and other organizations in the country.
8	IT	Maintenance of national portal of DGR, functional LAN to facilitate integration of functioning of DGR.
9	Adm & Coord	Budget, Administrative matters and allied activities.

ANNEXURE-III

(Referred to in Paragraph 2.1.8.2(B))

Details of Coal Subsidiaries of Coal India Limited

SN	Name of CIL Subsidiary	Location of CIL Subsidiary	Remarks
1	Mahanadi Coalfields Ltd(MCL)	Sambhalpur, Odisha	Sponsoring being done
2	South Eastern Coalfields Ltd (SECL)	Bilaspur, Chhattishgarh	Sponsoring being done
3	Western Coalfields Ltd (WCL)	Nagpur, Maharashtra	Sponsoring being done
4	Damodar Valley Corporation (DVC)	West Bengal	No further sponsoring being done
5	Bharat Coaking Coal Ltd (BCCL)	Dhanbad, Jharkhand	No sponsoring since 2009
6	Central Coalfields Ltd (CCL).	Ranchi, Jharkhand	No sponsoring since 2009

ANNEXURE-IV

(Referred to in Paragraph 2.1.8.2(C))

Details of revision made in reservation in respect of Defence Personnel

Name of the Oil Company	Date of issue of Brochure/ Orders	Name of Retail Outlet/LPG	Brief of revision made in reservation in respect of Defence Personnel
Oil Companies (IOCL,HPCL and BPCL)	October 2010	Regular LPG Distributors	18% reservation for Govt. Personnel Category which include Defence Personnel, Central/State Govt and Central/State PSU employees
Oil Companies (IOCL, HPCL and BPCL)	April 2011	Regular LPG Distributors	-As above-
		Rajiv Gandihi Gramin LPG Vitrak (RGGLV)	25% reservation for Combined Category consisting of Defence Personnel, Paramilitary / Police /Govt Personnel, Physically Handicapped Personnel and Outstanding Sports Personnel
IOCL	March 2012	Petrol/Diesel Retail Outlet Dealership	Reservation percentage of 8% and Priorities for Defence Personnel category kept same
Oil Companies (IOCL, HPCL and BPCL)	August 2013	Regular LPG Distributors	Reservation :- A.Open Cat(O) – 50.5% B.SC/ST Cat – 22.5% C.OBC Cat – 27% In above, sub-category created for Govt. Personnel consisting of Defence Personnel, Central/State Govt and Central/State PSU employees as under : Open category – 4%, SC/ST category – 2% and OBC category – 2% totaling to 8%.
HPCL	May 2014	Retail Outlet Dealers	Combined Category comprising of Defence Personnel, Para-Military Personnel, Central/State Govt and Central/State PSU employees under the Open category – 4%, SC/ST category – 2% and OBC category – 2% totaling to 8%.

ANNEXURE-V

(Referred to in Paragraph 2.1.8.2(C))

Details of Eligibility Certificates issued by DGR to the ESM/Widows/Dependents under Oil Products Agencies/LPG Distributorship Scheme

S. No.	Name of the scheme	No. of Eligibility Certificates issued by DGR to the ESM / Widows / Dependents				
		2010	2011	2012	2013	2014
1.	Petrol/Diesel Retail Outlet Dealer (8 % Defence Quota)	483	315	63	Nil	03
2.	Regular LPG Distributorship scheme (for Urban areas)	Nil	42	52	138	59
3.	Rajiv Gandhi Gramin LPG Vitran Yojna	50	60	32	10	03
	Total	533	417	147	148	65

ANNEXURE-VI

(Referred to in Paragraph 3.4)

Recovery at the instance of audit

Sl No	Unit/formation		Nature of over payment / non recovery	Amount objected (amt in ₹)	Amount accepted (amt in ₹)	Amount recovered (amt in ₹)
1.	PCDA HQ New Delhi	i)	Recovery on a/c of delayed supplies of equipments	--	USD 74770 (3476805)	4650694
		ii)			USD 49604 (6932845)	6932845
		iii)			SEK 40000.38 (363094)	363094
		iv)			SEK496829.42 (4840360)	4839207
		v)			USD31675.423 (1939656)	1939656
2	CO Chennai	i)	Recovery of training & living charges from Ministry of External Affair. (1$ conversion applied is 1US $ = ₹ 45/-)	761200 $	851805 $	
	PCDA SC Pune			34254000	38331225	20478312
		ii)	Recovery of Training & living charges from Min of External Affairs	266330072	266330072	290195350
3	CSD HO Mumbai	i)	Incorrect revision of rates	--	858398	858398
		ii)	Irregularreimbursement of electric charges /license fee & excess payment of deputation allowance	843369	444540	444540
		iii)	Re-imbursement of excess telephone charges in r/o landline/mobile connection at the residence of entitled officers	----	105600	105600
		iv)	Recovery of difference in rates from suppliers due to reduction in price with retrospective effect	----	144339	144339
		v)	Under recovery from firm due to incorrect raising of debit note	5025653	5025653	5025653
		vi)	Under recovery from firm on account of price reduction.	1433951	1433951	1433951

Sl No	Unit/formation		Nature of over payment / non recovery	Amount objected (amt in ₹)	Amount accepted (amt in ₹)	Amount recovered (amt in ₹)
		vii)	Revision of price and non recovery of difference in rates	388031	388031	388031
		viii)	Undue benefit to firm due to non revision of prices with retrospective effect	10317153	884416	884416
		ix)	Delay in ratification of provisional price reduction (M/s Pernod Ricard India Pvt Ltd Mumbai)	---	204804	204804
		x)	Re-introduction of item in CSD at reduced price	347325	347325	347325
		xi)	Recovery on a/c of non extension of reduced price to CSD, delay in ratification on price reduction, TA DA adjustment bills, irregularities in usage of staff car & irregular payment compensatory allowances.	---	184350	184350
4	PCDA(O) Pune	i	Recovery on a/c of Irregular payment of Transportation Allowance	912068	866380	669396
		ii	Recovery on a/c of Irregular payment of Qualification Grant.	726373	589240	584674
		iii	Recovery on a/c of irregular payment of Children Education allowance	406622	360421	346942
		iv	Recovery on a/c of encashment of leave/LTC	4281222	4012889	4012889
		v	Recovery on a/c of other allowance	3954497	3920436	3851092
5	CDA Secunderabad	i)	Non-recovery of Liquidated damages.	297430	297430	297430
		ii)	Recovery of Interest on Mobilization Advance.	2411929	2465718	1535653
		iii)	Recovery on a/c of liquidated damages/ overpayment to the supplier/ amenity grant	107039	107570	107570
6.	PCDA SC Pune	i)	Recovery of LTC/Down time payment/TDS on	107978	109128	109128

Sl No	Unit/formation		Nature of over payment / non recovery	Amount objected (amt in ₹)	Amount accepted (amt in ₹)	Amount recovered (amt in ₹)
			Professional Tax/Overpayment of VAT			
7(i)	DIAT Pune	i)	Non Recovery of Taxes	--	106228	106228
7(ii)	MIRC Ahmednagar	ii)		96855	87929	87929
7(iii)	CEPZ Pune	iii)		38387	38387	38387
7(iv)	GE Kamptee	iv)		16425	16425	16425
8(i)	HEMRL Pune	i)	Overpayment of Transportation Allowance	89504	89504	89504
8(ii)	CE(Fy) Hyderabad	ii)		18720	18720	18720
8(iii)	Supply Depot (ASC) Jamnagar	iii)		10076	10076	10076
8(iv)	GE(N) Pune	iv)		9592	5056	5056
9(i)	RCI Hyderabad	i)	Over payment of Pay and Allowances	62640	2077792	1704224
9(ii)		ii)		2232047	811250	811250
9(iii)	HEMRL Pune	iii)		77256	55886	55,886
9(iv)	VRDE Ahmednagar	iv)		18812	17165	17165
9(v)	DIAT Pune	v)		6265	6265	6265
9(vi)	CCE(R&D) Secunderabad	vi)		3360	58560	58560
10(i)	CCE(R&D) Secunderabad	i)	Non recovery of other allowances	-	102342	102342
10(ii)	HQ Arty Centre Hyderabad	ii)		-	231138	231138
10(iii)	HQ 2 STC Goa	iii)		943180	943180	915121
10(iv)	PAO GREF Pune	iv)		30964	23988	23988
10(v)	PAO (ORs) Guards Kamptee	v)		--	10653	10653
11(i)	MIRC Ahmednagar	i)	Miscelleneous Recovery	58678	65098	65098
11(ii)	MCEME Secunderabad	ii)		--	45892	45892
11(iii)	HQrs Arty Centre Hyderabad	iii)		4483	4483	4483
11(iv)	CDA (R&D) Hyderabad	iv)		--	5316	5318
12	PAO GREF Pune		Irregular payment of Transportation allowances/Field allowance	63247	63247	69752
13	PAO(ORs) EME Secunderabad		Recovery on account of payment of CMFAA to personnel on resettlement course	70621	73382	73382

Sl No	Unit/formation		Nature of over payment / non recovery	Amount objected (amt in ₹)	Amount accepted (amt in ₹)	Amount recovered (amt in ₹)
14	DGMAP		Non accounting/ monitoring of interest	----	3149380	3149380
	Total			**335995824**	**353082018**	**358657561**

Say ₹ 35.87 Crore

ANNEXURE-VII

(Referred to in Paragraph 3.4)

Savings at the instance of Audit

Sl No	Unit/formation	Nature of irregularity pointed out by audit	Remedial measures taken by units	Amount involved (₹ in lakh)
1	HQrs Andhra Sub Area, Secunderabad	Inclusion of special Item of work resulting in exceeding the Financial Powers delegated to GOC Andhra Sub Area	A/A cancelled	8.00
2	GE(S) Secunderabad	Sanctioning of work as authorized instead of special item of work	A/A cancelled	1.99
		Irregular sanction for provision of additional Dining Hall	A/A cancelled	1.49
3	GE Panaji	Provision of road without approval of GOC-in-C	A/A cancelled	1.97
4	HQrs Pune Sub Area	Irregular sanction for provision of store shelter at SSTA & Sport Complex	Sanction cancelled	14.64
		Irregular sanction for provision of Two 16 Mtr High MAST Light at SSTA & Sport Complex	Sanction cancelled	9.51
		Irregular provision of security wall 230 Mtr along north side of SSTA & Sport Complex	Sanction cancelled	14.79
5	PCDA(SC) Pune	Irregular sanction for provision of Chain link fencing near Guard Post No. 2 at COD Mumbai	A/A cancelled	1.99
		Irregular sanction for provision of security fencing behind main office of 414 ASC Bn Marketing (TA) Kamptee	A/A cancelled	1.90
		Excess payment of CGEIS	Amount restricted	0.22
6	PCDA(O) PUNE	Savings on account of Terminal Gratuity Claims (Through PS)	Claims amended	22.76
		Savings on account of Terminal Gratuity Claims (Through TAOS)	Claims amended	25.24
7.	DRDL Hyderabad	Savings on account of issue of Free Issue Material (FIM)	TPC recommendation for revised supply order cancelled.	731.85
		Total		**836.35**

Say ₹ 8.36 crore

ANNEXURE-VIII

(Referred to in Paragraph 3.4)

Adjustment in Annual Accounts at the instance of Audit

Sl No	**Unit/formation**	**Nature of irregularity pointed out by audit**		**Remedial measures taken by units**	**Amount involved (₹ in crore)**	**Net effect of the amount involved (ie. 50%) (₹ in Crore)**
1.	CSD HO MUMBAI	Saving of a/c of amendment to Annual Accounts for the year 2013-14 of CSD		Annual Accounts 2013-14 amended accordingly	281.00	140.50
		Under provisioning of freight charges, Office Expenses, Sundry Creditors during the year 2012-13	₹42.42 crore			
		Overstatement of Assets towards Closing Stock and Recovery of VAT for the year 2012-13	₹80.45 crore			
		Under provisioning of freight charges, Office Expenses, Sundry Creditors during the year 2013-14	₹ 104.88 crore			
		Overstatement of Assets towards Closing Stock and Recovery of VAT for the year 2013-14	₹53.25 crore			
		TOTAL	₹ 281.00 crore			**140.50**

Say ₹140.50 Crore

ANNEXURE-IX

(Referred to in Paragraph 7.1.2)

Details of Cost of Production and Value of Issues

	M&C	WV&E	A&E	AV	OEF	Total
Cost of Production						
2012-13	2363.68	3693.91	5285.98	3515.71	1113.16	15972.44
2013-14	2286.95	3655.37	5517.54	2930.54	1246.27	15636.67
2014-15	2518.20	4084.51	6017.46	2536.31	1319.25	16475.73
VOI						
2012-13	2516.28	4109.93	5540.77	3836.42	1115.90	17119.30
2013-14	2382.40	3966.44	5584.44	2926.91	1261.91	16122.10
2014-15	2638.65	3937.18	6128.84	2519.04	1402.66	16626.37
Breakup of cost of 2014-15 (with % of COP)						
Material	1177.50	2160.55	3900.75	1488.40	542.18	9269.38
	(46.76%)	(52.90%)	(64.82%)	(58.68%)	(41.10%)	(56.26%)
Labour	311.29	493.87	536.10	260.70	357.27	1959.23
	(12.36%)	(12.09%)	(8.91%)	(10.28%)	(27.08%)	(11.89%)
Direct Expense	111.82	46.63	67.85	42.28	5.25	273.83
	(4.44%)	(1.14%)	(1.13%)	(1.67%)	(0.40%)	(1.66%)
FOH	635.39	945.20	1167.19	550.90	309.86	3608.54
	(25.23%)	(23.14%)	(19.40%)	(21.72%)	(23.49%)	(21.90%)
VOH	282.20	438.26	345.57	194.03	104.69	1364.75
	(11.21%)	(10.73%)	(5.74%)	(7.65%)	(7.94%)	(8.28%)
Total	2518.20	4084.51	6017.46	2536.31	1319.25	16475.73
Inventory position						
Stores in hand	530.86	1055.61	2489.52	1662.59	167.08	5905.66
WIP	441.37	901.82	1206.03	1186.31	81.41	3816.94
Finished Stock	338.80	373.53	234.01	704.69	47.27	1698.30
Stores in transit	59.06	177.18	527.73	121.17	1.37	886.51
Total	1370.09	2508.14	4457.29	3674.76	297.13	12307.41

Source : Annual Accounts of the Ordnance Factories for the year 2014-15

ANNEXURE-X

(Refer to Para 8.1.2)

Details of Contract Concluded with DPSUs

Sl. No	Contrcat for	Date of Contract	Name of the DPSU	Qty	Cost (₹ in crore)	PDC
1	Advanced Light Helicopter (Weapon Syatem Integrated)	26-Dec-07	M/s HAL	60	6257.69	31 March 2016
2	KONKURS-Missile	28-Mar-08	M/s BDL	15140	1377.49	31 March 2012
3	Transportable Satellite Terminal (TST) for Strike Corps(KU Band)	4-Jun-09	M/s BEL	30	36.2	30 June 2010
4	Instant Fire detection & supression system (IFDSS) for BMP-2/2k	22-Feb-10	M/s BEL	2551	187.83	29 February 2012
5	Surveillance and Jamming (SUJAV) System	31-Mar-10	M/s BEL	6	99.68	30 September 2011
6	Battale Field Surveillance Radar (BFSR) Short Range (SR)	9-Nov-09	M/s BEL	177	74.5	11 August 2010
7	Battale Field Surveillance Radar(BFSR) Medium Range (MR),Meter Mast & HMV for Armr.	30-Mar-10	M/s BEL & M/s BEML	15+15+15	46.8	For BFSR 29 march 2011
8	Modification to Limited Series Production (LSP) series of Sarvatra Bridge System	26-Jul-10	M/s BEML	4	12.27	20 October 2011
9	STSU for MCCS	15-Dec-10	M/s BEL	5000	10.77	14 April 2011
10	3 Dimensional Tactical Control (3D TC) Radar	23-Mar-11	M/s BEL	29	1438.69	31 May 2014
11	Schilka Upgrade	25-Mar-11	M/s BEL	48	748.19	within 42 months of BPC
12	AKASH Weapon System	23-Mar-11	M/s BDL	2 Regiments	14180.46	2013-19
13	Battalefield Surveillance Syatem (BSS) Phase -2 (Project Sanjay)	28-Mar-11	M/s BEL	86	2539	28 February 2013
14	Command Information & Decision Support System (CIDSS) Phase-2 (Project SAMVAHAK)	25-Mar-11	M/s BEL	171	905	24 September 2013
15	Armoured Recovery Vehicle (ARV) WZT-3 class	31-Oct-11	M/s BEML	204	1400.85	30/10/2012 to 30/08/2014

Sl. No	Contrcat for	Date of Contract	Name of the DPSU	Qty	Cost (₹ in crore)	PDC
16	Fwd Observer Simulators	29-Feb-12	M/s BEL	50	20.61	28 February 2013
17	Low Intensity Conflict (LIC) Electronic Warfare (EW) System	12-Jul-11	M/s BEL	1	188	12 January 2013
18	Sarvatra Bridge	26-Mar-12	M/s BEML	22	573.98	Within 24 months of BPC
Total					30098.01	

ANNEXURE-XI

(Referred to in Paragraph 8.1.5)

Sl. No	Weapons & Equipment	Date of Contract	PDC	Present Position (as of July 2015)	Delay in supply (months)	Cost of Contract (₹ in crore)	Payment made (in crores)	Payment (in percent)
1	Advanced Light Helicopter (Weapon Syatem Integrated)	26-Dec-07	31 March 2016	7 Out of 60 ALH has been deliverd by the vendor, but not a single has been accepted by Army.	No supply	6257.69	3550.85	56.74
2	KONKURS-Missile	28-Mar-08	31 March 2012	11285 qty supplied till July 2015 . PDC extended to March 2016	48 months	1377.49	1233.13	89.52
3	Transportable Satellite Terminal (TST) for Strike Corps(KU Band)	4-Jun-09	30 June 2010	ATP in progress as of July 2015	No supply	36.2	23.18	64.03
4	Instant Fire detection & supression system (IFDSS) for BMP-2/2k	22-Feb-10	29 February 2012	delivery completed by February 2012	No delay	187.83	161.04	85.74
5	Surveillance and Jamming (SUJAV) System	31-Mar-10	30 September 2011	all systems delivered and commisioned by April 2013.	19 months	99.68	83.29	83.56
6	Battale Field Surveillance Radar (BFSR) Short Range (SR)	9-Nov-09	11 August 2010	Delivery completed by August 2013.	36 months	74.5	83.94	112.67

Sl. No	Weapons & Equipment	Date of Contract	PDC	Present Position (as of July 2015)	Delay in supply (months)	Cost of Contract (₹ in crore)	Payment made (in crores)	Payment (in percent)
7	Battale Field Surveillance Radar(BFSR) Medium Range (MR),Meter Mast & HMV for Armr.	30-Mar-10	For BFSR 29 march 2011	Supply completed by BEL but yet to be mounted on TATRA HMV.	No delay	46.8	40.02	85.51
8	Modification to Limited Series Production (LSP) series of Sarvatra Bridge System	26-Jul-10	20 October 2011	Delivery completed in June 2015	44 months	12.27	7.54	61.45
9	STSU for MCCS	15-Dec-10	14 April 2011	delivery was yet to commence.	No supply	10.77	0.93	8.64
10	3 Dimensional Tactical Control (3D TC) Radar	23-Mar-11	23 May 2014	BPC was accorded in February 2014 and seven radar delivered.	24 months in FOPM	1438.69	908.81	63.17
11	Schilka Upgrade	25-Mar-11	within 42 months of BPC	BPC was accorded in October 2014 and	23 months in FOPM	748.19	157.64	21.07
12	AKASH Weapon System	23-Mar-11	2013-2019	82 missiles has been supplied before complition of validation of FOPM (Jan-15) and none of the misslile storage facility has been handed over as of 31-July-15.	22 months in FOPM	14180.46	5761.11	40.63

Sl. No	Weapons & Equipment	Date of Contract	PDC	Present Position (as of July 2015)	Delay in supply (months)	Cost of Contract (₹ in crore)	Payment made (in crores)	Payment (in percent)
13	Battalefield Surveillance Syatem (BSS) Phase -2 (Project Sanjay)	28-Mar-11	28 February 2013	Beta testing by user was to be commenced by Sep-15, after completion of of the Beta testing, software will be ported on the system for conduct of validation trials.	No supply	2539	345.89	13.62
14	Command Information & Decision Support System (CIDSS) Phase-2 (Project SAMVAHAK)	25-Mar-11	24 September 2013	As of July-15, testing of software Build I in the SITE was yet to be commenced.	No supply	905	35.32	3.90
15	Armoured Recovery Vehicle (ARV) WZT-3 class	31-Oct-11	30/10/2012 to 30/08/2014	supply did not commence as of July 2015.	No supply	1400.85	280.17	20.00
16	Fwd Observer Simulators	29-Feb-12	28 February 2013	Supply completed by February 2013.	No delay	20.61	23.46	113.83
17	Low Intensity Conflict (LIC) Electronic Warfare (EW) System	12-Jul-11	12 January 2013	System delivered and commisioned in March 2015	26 months	188	140.51	74.74
18	Sarvatra Bridge	26-Mar-12	WIthin 24 months of BPC	Pilot sample was yet to be delivered.	No supply	573.98	86.1	15.00
	Total					30098.01	12922.93	42.94