

CHAPTER I: INTRODUCTION

1.1 About the report

The office of the Principal Director of Audit, Air Force and Navy (PDA/AFN) is responsible for auditing the accounts and the financial transactions related to Indian Air Force, Indian Navy, Indian Coast Guard and associated Research and Development (R&D) undertaken by the Defence Research and Development Organisation of the Ministry of Defence, linked Military Engineer Services (MES) offices and integrated Defence Accounts Department units dealing with these services. The audit exercise is carried out on behalf of the Comptroller and Auditor General of India in accordance with Article 151 of the Constitution of India.

The audit effort can be classified under three distinct types of audits: Financial Audit, Compliance Audit and Performance Audit.

Financial Audit is the review of financial statements of an entity that seeks to obtain an assurance that the financial statements are free from material misstatements and present a true and fair picture.

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

Performance Audits are in-depth examinations of a program, function, operation or the management system of entity to assess whether the entity is achieving economy, efficiency and effectiveness in the employment of available resources.

This report is on matters arising from the Compliance Audit of Indian Air Force, Indian Navy, Research and Development Organisation and associated activities and entities. The report contains findings pertaining to capital and revenue acquisitions, installation/upgradation of systems, blockage of funds and work services. Total financial value of cases commented upon in this report is Rs 5,698.40 crore. A brief financial analysis of the expenditure incurred on the Air Force, Navy, R&D (related to Air Force and Navy) and Coast Guard as a part of the over-all Defence budget of the country has also been included.

1.2 Authority for Audit

Article 151 of the Constitution of India and Section 13 of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 govern the scope and extent of audit. Detailed methodology of audit and reporting formats are prescribed in the 'Regulations of Audit and Accounts, 2007'.

1.3 Planning and Conduct of Audit

Audit areas are prioritised through an analysis of risks so as to assess their criticality in key operating units. Expenditure incurred, operational significance, past audit results and internal control issues are amongst the prime factors which determine the severity of the risks. This exercise in turn guides the formulation of the annual audit programme. The number of units selected for audit is determined by matching the high-risk areas with available resources. Besides, high-value capital acquisitions and procurements are audited by specially constituted dedicated teams under the personal supervision of senior officers.

In general, interaction with the auditee is encouraged from the initial stage in the auditing process. Audit findings are communicated during discussions at the end of an audit exercise and followed up in writing through Local Test Audit Reports / Statement of Cases. The response from the auditee is considered and results in either settlement of the audit observation or referral to the next audit cycle for compliance. Some of the more serious irregularities are processed 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.

At present, the audit universe of the office comprises 857 units. During 2008-09, audit of 290 units/formations was carried out by using 10,069 man days.

1.4 Internal Control and co-ordination between Internal and External Audit

The Finance Division of the Ministry of Defence is headed by the Secretary (Defence/Finance)/ Financial Advisor (Defence Services). The SDF/FADS is responsible for financial scrutiny, vetting, advice and concurrence of all proposals of the Ministry of Defence. FADS is also responsible for internal audit and for accounting of the Defence Expenditure. Internal financial advice is provided both at the Headquarters level as also at levels of Command Headquarters and other units. Internal financial control is further aided by periodic internal audit by the Controller General of Defence Accounts (CGDA), the Head of the Defence Accounts Department, who functions under the FADS. The Principal Controllers of Defence Accounts, Air Force and Navy functioning under CGDA are located at Dehradun and Mumbai respectively. They are responsible for internal audit, financial advice at unit level and for scrutiny, payments and accounting of all personnel claims and bills for supplies and services rendered, construction, repair works, miscellaneous charges etc. received from Air Force and Navy units.

The internal audit mechanism is expected to be effective in implementing the rules, procedures and regulations enunciated in the form of Defence Procurement Procedure, Manual, Codes, etc. The office of PDA/AFN actively seeks assistance and co-operation from internal audit in audit examination and scrutiny. Internal auditors have to carry out 100 *per cent* checks. The external/statutory audit bases its audit on sample / test check. The Inspection Reports (IR) generated by external audit on the basis of Local Audit are issued to auditee units as well as their internal auditors i.e. Defence Accounts Department. These IRs are pursued to their logical conclusion after ascertaining the views of the internal auditors. Draft paragraphs proposed to be included in the audit report are sent to Defence Secretary. Simultaneously,

a copy is also forwarded to CGDA. The Ministry furnishes its response only after vetting by the FADS.

1.5 Auditee Profile

1.5.1 Organisation – Key responsibilities

The Ministry of Defence at the apex level frames policies on all defence related matters. The Ministry 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 functions as the Head of the Department of Defence and is also responsible for coordinating the activities of other departments

The Indian Air Force is headed by the Chief of Air Staff. Air Headquarters (Air HQ) is the apex body and chief management organisation of the Indian Air Force. The ultimate and overall administrative, operational, financial, technical and maintenance control of IAF rests with Air HQ. Operational and maintenance units of IAF normally consist of Wings and Squadrons, Signal Units, Base Repair Depots and Equipment Depot.

The Indian Navy is headed by Chief of Naval Staff. Naval Headquarters (NHQ) is the apex body and chief management organisation and is responsible for command, control and administration of the Indian Navy. Operational and maintenance units of Indian Navy consist of Warships and Submarines, Dockyard, Naval Ship Repair Yards, Equipment Depots and Material Organisation.

The Coast Guard is the youngest service of the armed forces of India and was created to protect the country's vast coastline and offshore wealth. The Director General, Coast Guard exercises general superintendence, direction and control of the Coast Guard.

Military Engineer Services (MES) is one of the largest Government construction agencies. Engineer-in-Chief is the head of the MES. The MES is responsible for conclusion of contracts, execution of work services and maintenance of existing buildings of the Armed Forces. It works under the

Engineer-in-Chief Branch of Army Headquarters.

The Defence Research and Development Organisation undertakes design and development of weapon systems and equipment in accordance with the expressed needs and the qualitative requirements laid down by the services. Certain laboratories are dedicated exclusively to Air Force and Navy like the Gas Turbine and Research Establishment (GTRE), Aeronautical Development Agency (ADA), Electronics and Radar Development Establishment (LRDE) and Centre for Airborne System (CABS) etc. These organisations also render scientific advice to the Service Headquarters. They work under the Department of Defence Research and Development of Ministry of Defence.

The Defence Accounts Department is headed by the Controller General of Defence Accounts, New Delhi who functions under the Financial Advisor, Ministry of Defence. The Department provides services to the Armed Forces in terms of financial advice and accounting of Defence Services receipts and expenditure as well as Defence Pensions.

1.6 Significant Audit Observations

Audit has, over the years, commented on many critical areas of Defence Sector pertaining to Indian Air Force, Indian Navy, Indian Coast Guard and dedicated R&D projects. The Ministry of Defence, on its part, has taken several measures in response to these observations. An important step taken to improve procurement procedures has been the introduction of Defence Procurement Procedure and Defence Procurement Manual and their regular updation.

The present Audit Report points out significant deficiencies/ short comings in the procurement processes followed - both under Capital and Revenue – by Ministry of Defence as well as by the Services Organisation. In two high-value capital expenditure cases the acquisition process was vitiated as Ministry / Service Headquarters violated evaluation / selection criteria. Fleet tankers contracted for the Indian Navy, are being constructed from a steel (Paragraph 2.1) which does not meet the specifications of the Navy. An aerial reconnaissance system contracted by IAF (Paragraph 3.1) was not evaluated as per the laid down procedures. IAF is, resultantly, devoid of this state-of-the-

art system for the last decade. On the revenue side, Navy's decision to purchase a particular make of pump (Paragraph 4.3) which did not conform to the required specification led to non utilisation of pumps costing Rs 4.56 crore.

The report highlights cases involving substantial expenditure in which either the procurement has been delayed or has failed to achieve its objective. In the case of the Kaveri Engine Development Project (KEDP) (Paragraph 5.1) the delay is attributed to lag in indigenous research and development. In spite of an expenditure of Rs 1,892 crore and two decades of developmental effort, GTRE is yet to fully develop the Kaveri aero-engine to power the Light Combat Aircraft. In another indigenous effort, Indian Navy purchased seven imported systems at a cost of Rs 472 crore (Paragraph 2.6) on the ground of 'operational emergency' despite an on-going indigenous programme. By the time they were available and could be fitted onto the ships, the indigenous systems were also developed and productionised. Similarly, the Midlife Update (MLU) of Indian Navy's four minesweepers, sanctioned at a cost of Rs 517 crore, has been completed in the case of three ships after a delay of about two years (Paragraph 4.4) without the fitment of the envisaged state-of-the-art Mine Counter Measure System Suite (MCMS).

Instances of violation of contractual terms and disregard of instructions have also been reported. BEL violated the terms of the contract (Paragraph 2.2) and supplied 60 *per cent* of the ordered number of radars by manufacturing them from imported CKD kits rather than indigenously manufacturing them. As a result, BEL earned Rs 10.14 crore over and above the profit already allowed to it by IAF. Air Force authorities not only flouted rules and regulations in managing the Santushti Shopping Complex established on Government land (Paragraph 2.3) but also did not accomplish the welfare objectives for which the Complex was set up. Further, revenue to the extent of Rs 9.75 crore was credited outside Government account to non public fund. The Government has suffered losses on account of the inability of Ministry and IAF to ensure that the Fixed Price Quotation used by HAL to price goods and supplies is formulated in line with Government instructions. IAF reimbursed arrears (Paragraph 2.4) on account of wages and gratuity amounting to Rs 315 crore to HAL despite Government instructions to the contrary. Further, due to delay

in the revision of the base year for adoption in Fixed Price Quotation, IAF incurred an extra expenditure of Rs 400 crore.

This report also impresses upon the need to strengthen work services planning and management. Blade manufacturing infrastructure created at a cost of Rs 72 crore will be under-utilised due to unrealistic assessment of the actual requirement (paragraph 3.3). Frequent changes in plans have delayed the commissioning, activation and operationalisation of two IAF air bases (paragraph 2.7).

Several cases have been highlighted where more vigilance on the part of the department was required for instance, excess procurement of two electronic warfare system costing Rs 19.19 crore (paragraph 4.2), incorrect classification of repair task of an aero engine under warranty leading to avoidable expenditure of Rs 1.09 crore (paragraph 3.4), non-availing advantage of 'prompt payment' discount in procurement of petroleum products resulting in a loss of Rs 136.39 crore (paragraph 4.5) and lack of due diligence in passing claims of a vendor resulting in avoidable payment (paragraph 4.7).

1.7 Financial Aspects relating to Air Force and Navy

India's Defence Budget is broadly categorised under Revenue and Capital Expenditure. While Revenue expenditure includes Pay and Allowances, Stores, Transportation and Work Services etc., Capital expenditure covers expenditure on acquisition of new weapons and ammunition and replenishment of obsolete stores with modern variety.

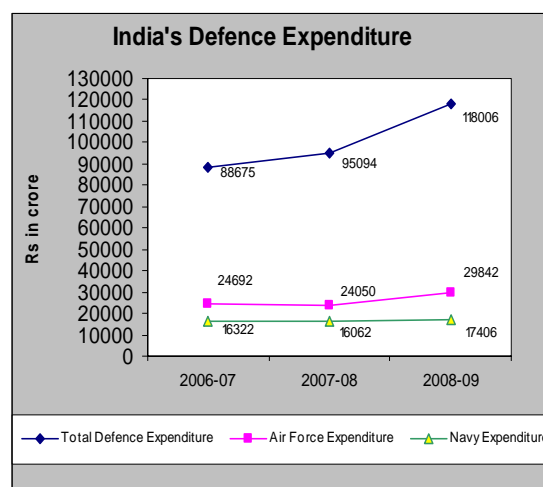
Indian Defence expenditure increased by 24.09 *per cent* from Rs 95,094 crore in 2007-08 to Rs 1,18,006 crore in 2008-09 primarily due to pay revision of the defence forces. The share of the Air Force and the Navy in the total expenditure on Defence Services in 2008-09 was Rs 29,842 crore and Rs 17,406 crore which together constituted approximately 40.04 *per cent*.

1.7.1 Defence Expenditure

1.7.2 The Indian defence expenditure, as depicted above, does not include the expenditure on the pensionary benefits of retired defence personnel and

expenditure incurred on Defence civilian staff like Defence Accounts Organisation, Defence Estates Organisation, Secretariat of the Ministry of Defence, Defence Canteens and Coast Guard Organisation. Indian defence spending increased from Rs 88,675 crore in 2006-07 to Rs 1,18,006 crore in 2008-09 with an average annual growth of 16.54 per cent. As a percentage of GDP, the Defence expenditure has shown an upward turn during this period from 2.07 per cent to 2.15 per cent.

Historically, revenue expenditure accounts for the bulk of the Defence Budget. Out of the total Defence expenditure, the share of revenue defence expenditure has gone up from 61.85 per cent in 2006-07 to 65.32 per cent in 2008-09 while the share of capital expenditure has gone down from 38.15 per cent to 34.67 per cent during the same period.



Defence Expenditure

(Rs in crore)

Year	Annual Expenditure			Percentage increase over previous year	Expenditure as percentage of CGE	Expenditure as percentage of GDP
	REVENUE	CAPITAL	TOTAL			
2006-07	54,847	33,828	88,675	5.99	14.64	2.07
2007-08	57,632	37,462	95,094	7.24	12.86	1.94 (Q)
2008-09	77,088	40,918	1,18,006	24.09	12.72	2.15*

Q - Quick Estimates

CGE – Central Government Expenditure

* Projected by CSO

1.7.2.1 Air Force and Navy Expenditure

The total expenditure incurred by the Indian Air Force and Navy during 2006-09 ranged between 46.26 and 40.04 *per cent* of the total Defence Budget. In the year 2008-09, while Air Force expenditure rose by 24.08 *per cent* from Rs 24,050 crore to Rs 29,842 crore, the Navy expenditure increased by 8.44 *per cent* from Rs 16052 crore to Rs 17,406 crore. The distribution of Defence expenditure is depicted in the following table:

(Rs in crore)

Year	DISTRIBUTION OF DEFENCE EXPENDITURE					
	Army	Air Force	Navy	Ordnance Factories	R&D	Total
2006-07	41,141	24,692	16,322	1,135	5,385	88,675
2007-08	47,421	24,050	16,052	1,425	6,146	95,094
2008-09	59,688	29,842	17,406	3,309	7,761	118,006

1.7.2.2 Air Force Expenditure

A broad summary of Air Force expenditure is given below.

Air Force Expenditure

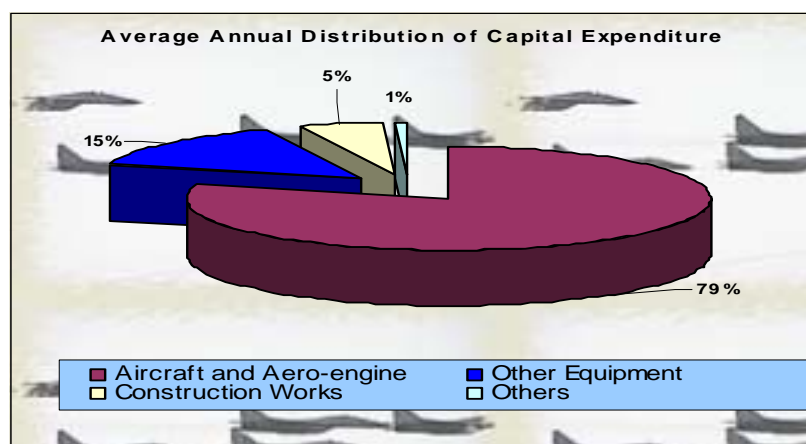
(Rs in crore)

Year	Total	Percentage change over previous year	As a percentage of total Defence Expenditure	Revenue	Capital
2006-07	24,692	(+) 12.62	27.85	10,065	14,627
2007-08	24,050	(-) 2.60	25.29	10,558	13,492
2008-09	29,842	(+)24.08	25.29	13,244	16,598

1.7.2.3 Capital Expenditure

The capital expenditure on Air Force rose by nearly 23.02 *per cent* during 2006 - 07 to 2008-09. In absolute terms, capital expenditure increased from Rs 14,627 crore in 2006 – 07 to Rs 16,598 crore in 2008-09.

The capital expenditure of IAF was mainly incurred on acquisition of new aircrafts and modernisation/ upgradation of the existing aircrafts. The average annual distribution of expenditure over different categories for the last three years is depicted below:



1.7.2.4 Revenue Expenditure

During the three year period under consideration, revenue expenditure increased by 31.58 *per cent* from Rs 10,065 crore in 2006-07 to Rs 13,243 crore in 2008-09. The sudden jump in the revenue expenditure during 2008-09 was primarily due to the pay revision of the Air Force personnel on account of Sixth Pay Commission. Repairs and maintenance of aircrafts including procurement of airframe and aero-engines, aviation stores of spares and POL¹ etc account for nearly 64.65 *per cent* of the revenue expenditure of the IAF. Besides, the pay and allowances of the IAF personnel

¹ POL = Petroleum, oil and lubricants

are nearly 31.29 *per cent* of the IAF revenue expenditure. The remaining expenditure is accounted for by transportation, works and other expenditure.

1.7.2.5 Indian Navy Expenditure

A broad summary of Navy expenditure is given below.

Navy Expenditure

(Rs in crore)

Year	Total	Percentage change over previous year	As a percentage of total Defence Expenditure	Revenue	Capital
2006-07	16,322	(+) 14.79	18.41	6,836	9,486
2007-08	16,052	(-) 1.65	16.88	7,117	8,935
2008-09	17,406	(+) 8.44	14.75	7,949	9,457

1.7.2.6 Capital Expenditure

The capital expenditure of Navy increased by 5.84 *per cent* primarily on account of acquisition/construction/upgradation.

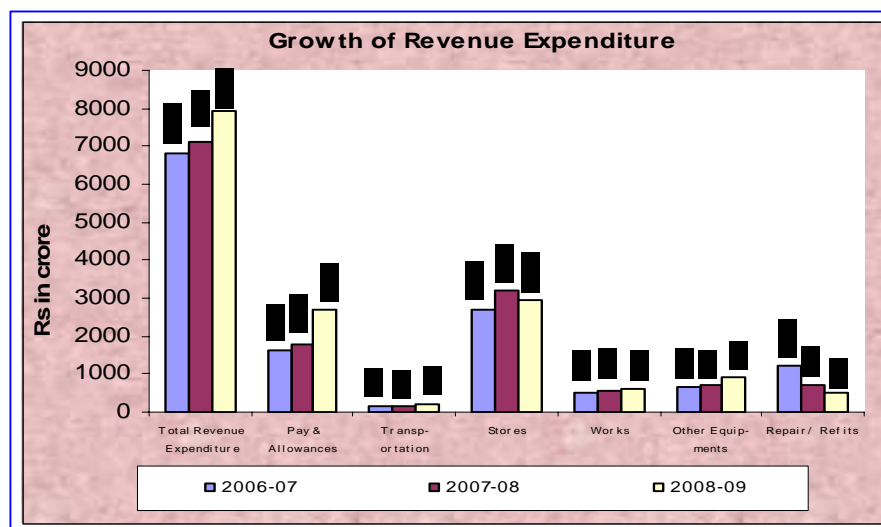
Capital Expenditure

(Rs in crore)

Year	Naval Fleet	Naval Dockyard	Aircraft and Aero-engine	Construction Works	Other Equipments	Others	Total
2006-07	7,080	465	366	186	1,187	202	9,486
2007-08	6,162	668	410	285	1,162	248	8,935
2008-09	5,404	1,164	538	406	1,716	229	9,457

1.7.2.7 Revenue Expenditure

Revenue expenditure increased by 16.28 per cent during the period 2006 – 07 to 2008 - 09 from Rs 6,836 crore to Rs 7,949 crore. Repairs



and refits of aircraft carriers/ frigates/ destroyers/ corvettes /other warships including procurement of stores of spares and POL etc account for almost 62.20 per cent of the revenue expenditure of the Navy. Besides, the pay and allowances of the Navy personnel constituted nearly 27.91 per cent of the Navy revenue expenditure.

1.8 Coast Guard Organisation

The budgetary allotments and expenditure incurred during the last three years are tabulated below:

(Rs in crore)

Year	Budget Estimates	Final Grant/ Appropriation	Expenditure	Percentage of BE which could not be utilised
2006-07	1,075.00	820.19	704.48	34
2007-08	1,150.00	852.37	668.62	42
2008-09	1,468.14	1,090.18	1,027.05	30

Although the Ministry obtained substantial hikes in the Budgetary Estimates for the Coast Guard in 2007-08 and 2008-09 from the Ministry of Finance/Parliament, about one-third of the provisions approved could not be spent.

Major items of Capital Expenditure are enumerated below:-

(Rs in crore)

Year	Ships & Fleet	Major Works and Land Acquisition	Acquisition of Aircraft	Total Capital Expenditure	Budget Estimates
2006-07	288.22	37.09	13.04	338.35	645.00
2007-08	179.64	52.86	22.88	255.38	735.21
2008-09	373.72	51.19	81.52	506.43	947.97

It would be apparent that the Coast Guard has not been able to utilise the funds approved in the Budget Estimates during the last three years. The non-utilisation of the BE provisions of Capital Expenditure has been substantial in 2007-08 (65 per cent) and 2008-09 (47 per cent).

Major items of Revenue Expenditure are also shown below:

(Rs in crore)

Year	Salaries/ Wages/ Allowances	Minor Works	POL	Machinery/ Equipment	Supply /Material	Others	Revenue Expenditure
2006-07	104.51	112.48	62.5	31.43	13.97	41.24	366.13
2007-08	116.17	115.89	71.26	37.71	17.53	54.68	413.24
2008-09	187.07	136.79	88.39	29.27	17.93	61.17	520.62

1.9 Receipts of the Air Force, Navy and Coast Guard

The details of receipts and recoveries pertaining to Air Force and Navy and Coast Guard during the last three years for the services that they have provided to other organisations / departments are given in the table below:

(Rs in crore)

Year	Receipt and Recoveries in respect of Air Force	Receipt and Recoveries in respect of Navy	Receipt and Recoveries in respect of Coast Guard
2006-07	416.51	121.62	4.17
2007-08	456.95	166.31	8.13
2008-09	433.30(RE)**	81.86(RE)**	11.60

** RE: Revised Estimate 2008-09

1.10 Appropriation and Expenditure

The summarised position of appropriation and expenditure during 2006-07 to 2008 - 09 in respect of the Air Force and the Navy is reflected in the table below:

(Rs in crore)

	Final Grant	Actual Expend-iture	Total Excess/ Savings (+) / (-)	Final Grant	Actual Expend-iture	Total Excess/ Savings (+) / (-)	Final Grant/	Actual Expend-iture	Total Excess/ Savings (+) / (-)
AIR FORCE									
REVENUE	2006-2007			2007-2008			2008-2009		
Voted	10,115.89	10,062.96	(-) 52.93	10,663.58	10,556.01	(-) 107.57	12,632.21	13,242.58	(+)610.37
Charged	5.93	1.54	(-)4.39	1.94	0.98	(-) 0.96	2.04	0.79	(-)1.25
CAPITAL									
Voted	13,710.20	14,617.29	(+)907.09	13,594.87	13,489.68	(-) 105.19	16,539.12	16,591.21	(+)52.09
Charged	15.30	10.00	(-) 5.30	3.88	2.31	(-) 1.57	5.81	6.98	(+)1.17
Total	23,847.32	24,691.79	(+)844.27	24,264.27	24,048.98	(-)215.29	29,179.18	29,841.56	(+)662.38

(Rs in crore)

	Final Grant	Actual Expenditure	Total Excess/Savings (+) / (-)	Final Grant	Actual Expenditure	Total Excess/Savings (+) / (-)	Final Grant/	Actual Expenditure	Total Excess/Savings (+) / (-)
NAVY									
REVENUE	2006-2007			2007-2008			2008-2009		
Voted	6,889.27	6,836.29	(-) 52.98	7,172.68	7,115.58	(-) 57.10	8,190.56	7,948.42	(-)242.14
Charged	1.37	0.24	(-) 1.13	1.37	1.29	(-) 0.08	1.63	0.36	(-)1.27
CAPITAL									
Voted	9,607.77	9,484.64	(-)123.13	8,892.10	8,934.47	(+) 42.37	9,195.86	9,454.86	(+)259.00
Charged	3.60	1.07	(-) 2.53	6.40	0.69	(-) 5.71	8.40	239	(-)6.01
Total	16,502.01	16,322.24	(-)179.77	16,072.55	16,052.03	(-) 20.52	17,396.45	17,406.03	(+)9.58

An analysis of the Appropriation Accounts, Defence Services for each of the three years has been included in the Report of the Comptroller and Auditor General of India for the relevant years, Union Government – Accounts of the Union Government.

1.11 Audit Impact

1.11.1 Response of the Ministry to Draft Audit Paragraphs

On the recommendations of the Public Accounts Committee (PAC), 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 proposed for inclusion in this Report were forwarded to the Secretary, Ministry of Defence between 14 May 2009 and 17 November 2009 through demi-official letters drawing attention to the audit findings and requesting for a response within six weeks. The Draft Paragraph on Kaveri engine was, however, forwarded through demi-official letter to Scientific Advisor to Raksha Mantri on 10 November 2008.

Despite the instructions of the Ministry of Finance issued at the instance of the PAC, the Ministry did not send replies to 4 Draft Paragraphs out of 25² Paragraphs included in this Report. Thus, the response of the Ministry could not be included in respect of these paragraphs.

1.11.2 Action Taken Notes on Audit Paragraphs of earlier Reports

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

Review of outstanding ATNs on Audit Paragraph relating to the Air Force, Navy and Coast Guard as on 30 June 2010 showed that the Ministry had not submitted the initial ATNs in respect of 7 out of 64 paragraphs included in the Audit Reports up to and for the year ended March 2008 as shown in Annexure-I.

1.11.3 Outcomes

Findings of earlier reports have resulted in various procedural changes in Defence Procurement Procedure as well as systemic changes in operations of the audit entity. In addition, each year's audit also results in savings and recoveries. During last three years, recoveries to the extent of Rs 7.34 crore (Rs 2.13 crore in respect of current Audit Report) and savings to the extent of Rs 12.45 crore (Rs 3.57 crore for current Audit Report) were effected at the instance of Audit.

² The introductory remarks included in Chapter I of this report were not forwarded to Ministry for their comments