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**STANDING COMMITTEE ON DEFENCE  
(2004-2005)**

**(FOURTEENTH LOK SABHA)  
MINISTRY OF DEFENCE**

**DEMANDS FOR GRANTS**

**(2005-2006)**

**SECOND REPORT**



**LOK SABHA SECRETARIAT  
NEW DELHI**

**April, 2005/Vaisakha, 1927 (Saka)**

SECOND REPORT

STANDING COMMITTEE ON DEFENCE  
(2004-2005)

(FOURTEENTH LOK SABHA)  
MINISTRY OF DEFENCE  
DEMANDS FOR GRANTS  
(2005-2006)

*Presented to Lok Sabha on 25 April, 2005*  
*Laid in Rajya Sabha on 25 April, 2005*



LOK SABHA SECRETARIAT

NEW DELHI

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**COMPOSITION OF THE STANDING COMMITTEE ON DEFENCE (2004-2005)**

Shri Balasaheb Vikhe Patil

- Chairman

**MEMBERS**

LOK SABHA

2. Shri Churchill Alemao
3. Shri Iliyas Azmi
4. Shri A.V. Bellarmin
5. Shri Suresh Chandel
6. Shri Thupstan Chhewang
7. Smt. Sangeeta Kumari Singh Deo
8. Shri Milind Deora
9. Shri Bhupinder Singh Hooda
10. Shri Ramesh Jigajinagi
11. Shri Suresh Kalmadi
12. Dr. C. Krishnan
13. Shri S.D. Mandlik
14. Dr. K.S. Manoj
15. Shri Raghuraj Singh Shakya
16. Shri Mahadeorao Shivankar
17. Shri Ganesh Prasad Singh
18. Shri Manavendra Singh
19. Shri Balashowry Vallabhaneni
20. Ms. Ingrid Mcleod
21. Shri Dharmendra Yadav

**RAJYA SABHA**

22. Shri R.K. Anand
23. Dr. Farooq Abdullah
24. Gen. (Retd.) Shankar Roy Chowdhury
25. Shri T.T.V. Dhinakaran
26. Smt. N.P. Durga
27. Shri Janardan Dwivedi
28. Shri Pramod Mahajan
29. Shri Mukhtar Abbas Naqvi

30. Shri Anand Sharma  
31. Shri Lalit Suri

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### **SECRETARIAT**

1.	Shri P.D.T. Achary	-	Secretary
2.	Shri M. Rajgopalan Nair	-	Additional Secretary
3.	Shri P.K. Bhandari	-	Director
4.	Smt. Anita Jain	-	Deputy Secretary
5.	Shri D.R. Shekhar	-	Under Secretary
6.	Shri L.V. Ramana	-	Committee Officer
7.	Shri Nilendu Kumar	-	Senior Executive Assistant

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### **INTRODUCTION**

I, the Chairman, Standing Committee on Defence (2004-05) having been authorized by the Committee to submit the Report on their behalf, present this Second Report on the Demands for Grants of the Ministry of Defence for the year 2005-06.

2. The Standing Committee on Defence (2004-05) was constituted on 5<sup>th</sup> August, 2004. One of the functions of the Standing Committee, as laid down in Rule 331E of the Rules of Procedure and Conduct of Business in Lok Sabha, is to consider Demands for Grants of the concerned Ministry/ Department and to make a Report on the same to the House.

3. The Committee considered the Demands for Grants pertaining to the Ministry of Defence for the year 2005-06, which were laid on the Table of the House on 17 March, 2005. The Committee took evidence of the representatives of the Ministry of Defence on 21, 22, 24 March and 2 April, 2005. Besides this, the Committee also took experts opinion.

4. The Committee during their examination of Demands for Grants of Ministry of Defence and Defence Services for the year 2005-06 have, inter-alia, examined in this report the General Defence Budget and Defence Planning in detail. The Committee with view to address the persisting bottlenecks pertaining to certain crucial areas of Army, Navy and Air Force, have recommended concrete measures on the modernisation of Ordnance Factories including recycling of obsolete ammunition, the defence procurement system as well as expediting the projects of DRDO viz. Development of Bhim Guns, Light Combat Aircraft (LCA), Kaveri Engine etc. construction of aircraft carrier – the Air Defence Ship showing cost and time over-run and development of Intermediate Jet Trainer (HJT –36) into a futuristic

Advanced Jet Trainer for Indian Air Force. The Committee also feel that the acquisition of indigenously developed Arjun Tank should be given preference over foreign tanks by giving firm orders. Like wise, the Air Force should also give firm orders to HAL for manufacturing of reasonable number of LCA's or any other weapon systems indigenously developed.

5. The Committee also note with concern the failure of the Government to finalize the 10<sup>th</sup> the Defence Plan so far. The Committee have desired that immediate action should be taken to finalize the 10<sup>th</sup> Plan and simultaneously 11<sup>th</sup> Plan should be finalized at least a year in advance.

6. The Committee have also noticed that sufficient emphasis has not been laid on the self reliance and indigenisation of defence production by cost sharing including private participation. The Committee has desired that 11<sup>th</sup> Plan should be fully devoted to the same and have suggested a numbers of measures to encourage indigenous production.

7. The Committee also express concern about the surveillance capabilities especially radar system of our forces and desire that the Government should take effective steps in this direction.

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8. The Committee wish to express their thanks to the representatives of the Ministry of Defence and the non-official experts for appearing before the Committee for evidence and for furnishing the material and information in a very short span of time which the Committee desired in connection with the examination of Demands for Grants of the Ministry for 2005-06.

9. For facility of reference and convenience, the observations/ recommendations of the Committee have been printed in bold type in the body of the report.

**NEW DELHI;**  
**21, April 2005**  
**1 Vaisakha, 1927 (Saka)**

**BALASAHEB VIKHE PATIL,**  
**Chairman,**  
**Standing Committee on Defence**

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## **REPORT**

### **CHAPTER - I**

#### **GENERAL DEFENCE BUDGET**

1.1 India's security preoccupations are determined by the dynamics of the global and regional strategic and security environment. The post-Cold war international situation and the terrorist attack on Indian Parliament and on the twin towers in the United States on 9/11 have brought into sharp focus the concern of the international community on global security issues and challenges, though significant differences of perception and action on specifics remain. India's strategic location, its long coast line and distance island territories and the continuing acts of terrorism from across her borders, require India to maintain a high level of vigilance and defence preparedness. Against this background, the Committee have examined this year's budget estimates of the Ministry of Defence.

1.2 The budgetary requirements for the Defence Services are included in the following six Demands for Grants presented to Parliament :—

- Demand No. 23, Defence Services — Army
- Demand No. 24, Defence Services — Navy
- Demand No. 25, Defence Services — Air Force
- Demand No. 26, Defence Ordnance Factories
- Demand No. 27, Defence Services – Research & Development
- Demand No. 28, Capital Outlay on Defence Services.

1.3 The requirements for the Civil expenditure of the Ministry of Defence Secretariat, Defence Accounts Department, Canteen Stores Department, Defence Estates Organization, Coast Guard Organisation, JAK LI (w.e.f. BE 2005-06) etc., and Defence Pensions, are provided for in two separate Civil Demands for Grants of the Ministry of Defence, viz. Demand No. 21 – MOD (Civil) and Demand No. 22 – Defence Pensions. These are not included in the overall Defence Allocation of Rs. 83000.00 crores in Budget Estimates 2005-

2006. The requirements of the Border Roads Organisation are provided for by the Ministry of Surface Transport.

1.4 The `running' or `operating' expenditure of the three Services and other Departments, viz. Defence Research and Development Organisation (DRDO), Director-General of Ordnance Factories (DGOF), Directorate General of Quality Assurance (DGQA), National Cadet Corps (NCC), Directorate General Aeronautical Quality Assurance (DGAQA) and Directorate of Standardisation are provided under the first five Demands, which cater to the Revenue Expenditure, while the sixth, viz. Capital Outlay on Defence Services, caters to the expenditure incurred on building or acquiring durable assets. The Demands No. 23 (Defence Services – Army) caters to the Revenue expenditure of Army, NCC, and DGQA, and Demand No. 24 (Defence Services –Navy ) caters to Navy and Joint Staff.

1.5 The Revenue Expenditure 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. The Capital expenditure includes expenditure on lands, construction works, plants and machinery, equipment, tanks, Naval Vessels, Aircraft and Aeroengines, Dockyards, etc. The expenditure on items which have a unit value of Rs. 10 lakhs and above and a life span of 7 years or more, is debited to the Capital Heads.

1.6 Approval of Parliament 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.

### **Civil Estimates of the Ministry of Defence**

1.7 As stated above, the requirement for the Civil expenditure of the Ministry of Defence and Defence Pensions are provided in separate Demands for Grants. These are Demand No. 21 – Ministry of Defence (Civil) and Demand No. 22 – Defence Pensions.





**Grant No. 21**

1.8 The provisions in RE 2004-2005 under Demand No. 21 are given below. Major components of gross Revenue Expenditure in Revised Estimates 2004-2005 are CSD ( Rs. 5715.80 crores ), Defence Accounts Department ( Rs. 462.45 crores ), Coast Guard Estates Organisation (DEO) (Rs. 48.47 Crores). In the Capital outlay of Rs. 427.75 crores in the Revised Estimates 2004-2005 the major allocations are for the capital Outlay on other fiscal services – Coast Guard Organisation (Rs. 400.00 crores), housing and office buildings (Rs. 25.71 crores) and Miscellaneous Loans for URC by CSD (Rs. 2.04 crores ), etc.

(Rs. in Crores)

	<b>BE 2004-05</b>	<b>RE 2004-05</b>	<b>BE 2005-06</b>
Gross Revenue	5612.54	6572.25	6886.22
Capital	435.82	427.75	529.17
Gross Expenditure	6048.36	7000.00	7415.39
Receipts (CSD) (-)	5162.01	6000.00	5915.39
Net Expenditure	886.35	1000.00	1500.00

(Break up is given in Annexure-I)

**Grant No. – 22**

1.9 Demand No. 22 caters for Defence Pensions. This provides for pensionary charges in respect of retired Defence Personnel (including Civilian employees) of the three services viz. Army, Navy and Air Force and also employees of Ordnance Factories etc. It covers payment of Service Pensions, Gratuity, Family Pensions, disability pensions, commuted value of pensions, leave encashment & casualty awards such as War-Injury Pension and also Gallantry awards like Param Vir Chakra, Mahavir Chakra etc.

1.10 The position of budgetary allocation under this Demand is as under:

(Rs. in crores)

B.E. 2004-2005	R.E. 2004-2005	B.E. 2005-2006
11250.00	11922.00	12452.00

(Break up is given in Annexure-II)

1.11 The requirement of an additional Rs. 672.00 cr. in RE 2004-2005 is mainly due to impact of 50 % Dearness Relief (DR) merger with pension and an increase of Rs. 1202.00 crore is due to 50 % DR merger and normal growth in number of pensioners and pensionary benefits during 2005-06.

### Budget Estimates (BE) of Defence Services for 2005-06

1.12 The Budget Estimates for the year 2005-06, as compared with the Budget and Revised Estimates for 2004-2005 and the actual expenditure during the year 2003-2004 are summarized below:

(Rs. in crore)

	Actuals, 2003-04	Budget Estimates 2004-05	Revised Estimates, 2004-05	Budget Estimates, 2005-06
<b>REVENUE EXPENDITURE</b>				
Gross Expenditure : Voted	45554.27	45946.32	47421.99	51362.97
Charged	12.19	19.00	19.14	18.27
Total	45566.46	45965.32	47441.13	51381.24
Receipt and Recoveries	2363.27	2448.17	2588.83	2756.38
Net Revenue Expenditure	43203.19	43517.15	44852.30	48624.86
<b>CAPITAL EXPENDITURE</b>				
Gross Expenditure: Voted	16856.00	33472.99	32132.67	34360.28
Charged	6.61	9.86	15.03	14.86
Total	16862.61	33482.85	32147.70	34375.14
Recoveries on Capital Account	--	--	--	--
Net Capital Expenditure	16862.61	33482.85	32147.70	34375.14
<b>Net Revenue &amp; Capital Expenditure</b>	60065.80	77000.00	77000.00	83000.00
<b>Capital Expenditure as a percentage of the total net Revenue &amp; Capital Expenditure</b>	<b>28.07</b>	<b>43.48</b>	<b>41.75</b>	<b>41.42</b>

### Allocations for 2004-2005

1.13 As indicated in the General Budget, the provisions for Defence Services under Demand Nos. 23 to 28 for 2004-2005 in the Budget Estimates (BE) was Rs. 79,448.17 crores (Gross) and Rs. 77,000.00 crores (Net). The Revised Estimates (RE) have been pegged to Rs. 79588.83 crores (Gross) and Rs. 77,000.00 crores (Net). In the net, the R.E. for 2004-2005 shows no change over the B.E. 2004-2005.

1.14 The **Demand-wise position** is as under:

		(Rs. in crores)	
<u>Demand</u>	<u>B.E. 2004-2005</u>	<u>R.E. 2004-2005</u>	
1. Army (Revenue expdr. of Army, NCC and DGQA)	28642.99	29977.40	
2. Navy (Revenue expdr. of Navy and Joint Staff)	5377.63	5346.53	
3. Air Force (Revenue expdr. of Air Force)	8646.80	8676.80	
4. Defence Ordnance Factories (Revenue expdr. of Ord. Factories)	944.74	1020.19	
5. Research & Development	2353.16	2420.21	
6. Capital Outlay on Defence Services (Capital expdr. of all Services/Deptts )	33482.85	32147.70	
	-----	-----	
Total (Gross)	79448.17	79588.83	
Receipts / Recoveries	(-) 2448.17	(-) 2588.83	
Total (Net)	77000.00	77000.00	

Out of the Revised Estimates of Rs. 77000.00 crores for 2004-2005, the provision for Revenue Expenditure is Rs. 44852.30 crores, while that for Capital Expenditure is Rs. 32147.70 crores.

1.15 The Major components of the net Capital expenditure of Rs. 32147.70 crores are Land – Rs. 29.83 crores, Works – Rs. 1828.57 crores (incl. MAP – Rs. 252.60 crores ), Aircraft – Rs. 16018.15 crores, Heavy and Medium Vehicles – Rs. 288.71 crores, Other Equipment – Rs. 7388.10 crores ( incl. DGOF issues – Rs. 1441.86 crores), Naval Fleet – Rs. 4134.26 crores, Machinery and Equipment for Ordnance Factories – Rs. 6.97 crores, R & D – Rs. 1336.91 crores and other items – Rs. 1116.20 crores.

### **Budget Estimates 2005-2006**

1.16 The Budget Estimates for 2005-2006 work out to Rs. 85756.38 crores (Gross) and Rs. 83000.00 crores (Net).

1.17 The **Demand-wise position** is as under:

(Rupees in crore)

<u>Demand</u>	<u>R.E. 2004-2005</u>	<u>B.E. 2005-2006</u>
1. Army (Revenue expdr. of Army, NCC, R & D and DGQA)	29977.40	32098.70
2. Navy (Revenue expdr. of Navy and Joint Staff)	5346.53	6105.95
3. Air Force (Revenue expdr. of Air Force)	8676.80	9192.67
4. Defence Ordnance Factories (Revenue expdr. of Ord. Factories)	1020.19	1159.44
5. R & D	2420.21	2824.48
6. Capital Outlay on Def. Services (Capital expdr. of all Services/ Deptts)	32147.70	34375.14
Total (Gross)	79588.83	85756.38
Receipts / Recoveries (-)	2588.83	(-) 2756.38
Total ( Net)	77000.00	83000.00

1.18 A comparison of the Service / Department-wise allocation in RE 2004-2005 and BE 2005-2006 is given below :

(Rupees in crores)

Service * Deptt.	R.E. 2004-2005	% age of Total Budget	B.E. 2005-2006	% of Total Total Budget	Details are in
Army	35888.52	46.61 %	40288.32	48.54 %	ANNEXURE – III
Navy	13327.50	17.31 %	15253.00	18.38 %	ANNEXURE - IV
A.F	23783.82	30.89 %	21808.76	26.27 %	ANNEXURE – V
DGOF	(-)158.78	(-)0.21 %	( - ) 127.94	(-)0.15 %	ANNEXURE –VI
R & D	3747.12	4.87 %	5356.34	6.45 %	ANNEXURE – VII
DGQA	411.82	0.53 %	421.52	0.51 %	ANNEXURE –VIII
<b>TOTAL</b>	<b>77000.00</b>	<b>100 %</b>	<b>83000.00</b>	<b>100 %</b>	

\* Net Revenue plus Capital Provision has been shown here.

1.19 The **Gross** Revenue Expenditure in the Budget Estimates for 2005-2006 is 59.92 % as compared to 59.61 % in the Revised Estimates 2004-2005. The Gross Capital Expenditure in the Budget Estimates 2005-2006 is 40.08 % as against 40.39 % in the Revised Estimates 2004-2005.

1.20 The **Net** Revenue expenditure in the Budget Estimates for 2005-2006 is 58.58 % as compared to 58.25 % in the Revised Estimates, 2004-2005. The Net Capital Expenditure in the Budget Estimates 2005-2006 is 41.42 % as against 41.75 % in the Revised Estimates 2004-2005.

## Growth of Defence Expenditure vis-à-vis other economic parameters

1.21 The following table shows Defence expenditure as a percentage share of the total Central Government expenditure as well as a percentage of GDP.

Year	Def. Exp. as % age of Central Govt. Expdr	Def. Exp. as % age of GDP	
1987-88	18.39	3.38	
1988-89	17.81	3.16	
1989-90	15.52	2.97	
1990-91	14.65	2.71	
1991-92	14.67	2.50	
1992-93	14.34	2.35	
1993-94	15.40	2.54	
1994-95	14.46	2.30	
1995-96	15.06	2.26	
1996-97	14.68	2.16	
1997-98	15.20	2.32	
1998-99	14.28	2.29	
1999-2000	15.79	2.43	
2000-2001	15.24	2.37	
2001-2002	14.97	2.39	
2002-2003	13.44	2.26	P
2003-2004	12.74	2.18	Q
2004-2005 (RE)	15.22	2.48	A
2005-2006 (BE)	16.14	2.38	A

- P- Provisional  
 Q- Quick Estimates  
 A- Advance Estimates

### Source

1. The data relating to Central Government expenditure has been taken from the document "Budget at a Glance" of the relevant years, circulated by Ministry of Finance as part of the General Budget documents.
2. The data relating to GDP ( at Market prices ) has been taken from Economic Survey 2004-2005 (page S-7)

**Requirements submitted by various Service HQrs / Departments in the Ministry of Defence for the year 2005-2006**

1.22 The three services and Defence Departments projected a total requirement of Rs. 94567.89 crores for 2005-06. Of this, Rs. 50444.03 crores were under Revenue and Rs. 44123.86 crores under capital.

1.23 Ministry of Finance have allocated Rs. 83000.00 crores. Of this, Rs. 48624.86 crores have been provided under Revenue and Rs. 34375.14 crores under Capital outlay.

1.24 Service-wise/Department-wise position for 2005-06 is given as under:

(Rs. in crores)

Service/ Department	BE 2005-06		Shortfall of (3) over (2)	% age shortfall
	Projections made by Services/Deptts.	Budget Allocation as per ceiling made by MOF		
(1)	(2)	(3)	(4)	(5)
Army	45022.05	40288.32	4733.73	10.51
Navy	16913.66	15253.00	1660.66	9.82
A.F.	26973.41	21808.76	5164.65	19.15
DGOF	-127.94	-127.94	0.00	0.00
R & D	5356.34	5356.34	0.00	0.00
DGQA	430.37	421.52	8.85	2.06
<b>Total</b>	<b>94567.89</b>	<b>83000.00</b>	<b>11567.89</b>	<b>12.23</b>

1.25 Service-wise /Department-wise position for 2004-05 is given as under:

(Rs. in crores)

Service/ Department	BE 2004-05		Shortfall of (3) over (2)	% age shortfall
	Projections made by Services/Deptts.	Budget Allocation as per ceiling made by MOF		
(1)	(2)	(3)	(4)	(5)
Army	49429.21	36277.50	13151.71	26.61
Navy	16681.05	13149.97	3531.08	21.17
A.F.	32567.98	23270.53	9297.45	28.55
DGOF	-284.04	-139.58	-144.46	50.86
R & D	4280.94	4000.94	280.00	6.54
DGQA	475.56	440.64	34.92	7.34
<b>Total</b>	<b>103150.70</b>	<b>77000.00</b>	<b>26150.70</b>	<b>25.35</b>

The Budget allocation for 2005-2006 (Rs. 83,000 crores), however, shows an increase of Rs. 6000.00 crores (7.79 %) over the BE 2004-2005 (Rs. 77,000 crores).



## Capital and Revenue Expenditure Budget 2005-2006

1.26 The Defence Services / Departments projected a total requirement of Rs. 44123.86 crores under Capital. This included Rs. 35765.14 crores for ongoing/committed schemes and new schemes under modernisation, Rs. 1438.15 crores for DGOF issues to Services/Departments and Rs. 3846.50 crores for various land, works programmes etc. of the three Defence Services and balance Rs. 3074.07 crores for other Departments viz. DGOF, R & D and DGQA. Against this, a total of Rs. 34375.14 crores have been allocated under Capital, based on the budgetary ceiling conveyed by the Ministry of Finance.

1.27 The Service-wise / Department-wise position is given as under:

(Rs. in crore)

<b>Services / Department</b>	<b>Projections made by Services/Deptts.</b>	<b>As allocated</b>
<b><u>Army Capital</u></b>		
Equipment Heads incl. DGOF issues	11182.19	7089.83
Lands, Works incl. MAP, etc.	2767.99	2337.31
	-----	-----
Sub-Total Capital		
Net Revenue	13950.18	9427.14
Total Army	31071.87	30861.18
	45022.05	40288.32
	-----	-----
<b><u>Navy Capital</u></b>		
Equipment Heads	10086.86	8854.07
Land, Works incl. MAP.	420.08	371.58
	-----	-----
Sub-Total Capital	10506.94	9225.65
Net Revenue	6406.72	6027.35
Total Navy	16913.66	15253.00
	-----	-----
<b><u>Air Force Capital</u></b>		
Equipment Heads	15934.24	12361.44
Land, Works incl. MAP.	814.30	442.71
	-----	-----
Sub-Total Capital	16748.54	12804.15
Net Revenue	10224.87	9004.61
Total Air Force	26973.41	21808.76
	-----	-----
<b><u>Total (Army, Navy &amp; AF)</u></b>		
Capital	41205.66	31456.94
Net Revenue	47703.46	45893.94
Total Net Rev + Cap	88909.12	77350.08
<b><u>DGOF</u></b>		
Capital	336.34	336.34

Net Revenue	(-) 464.28	(-) 464.28
Total DGOF	(-) 127.94	(-) 127.94
<b><u>R &amp; D</u></b>		
Capital	2541.86	2541.86
Net Revenue	2814.48	2814.48
Total R & D	5356.34	5356.34
<b><u>DGQA</u></b>		
Capital	40.00	40.00
Net Revenue	390.37	381.52
Total DGQA	430.37	421.52
	-----	-----
Grand Total		
Capital	44123.86	34375.14
Net Revenue	50444.03	48624.86
Net Rev + Cap	94567.89	83000.00
	-----	-----

### 1.28 Statement showing utilisation of funds from 2001-02 onwards year-wise

(Rs. in crore)

Services	2001-02 (NET)					2002-03 (NET)				
	BE	RE	Actual	Shortfall (RE-Actual)	Surrender (BE-RE)	BE	RE	Actual	Shortfall (RE-Actual)	Surrender (BE-RE)
Army	34601.81	32996.34	31096.88	1899.46	1605.47	35011.20	31723.96	32127.78	-403.82	3287.24
Navy	9138.82	8696.05	8368.45	327.60	442.77	9872.02	8435.49	8155.32	280.17	1436.53
Air Force	15272.56	11968.30	11783.76	184.54	3304.26	15689.05	12421.53	12385.26	36.27	3267.52
DGOF	-894.75	-350.13	-471.61	121.48	-544.62	353.00	-166.73	-388.89	222.16	519.73
R&D	3508.34	3323.04	3119.80	203.24	185.30	3655.89	3183.25	3008.11	175.14	472.64
DGQA	373.22	366.40	368.45	-2.05	6.82	418.84	402.50	374.25	28.25	16.34
<b>Grand Total</b>	<b>62000.00</b>	<b>57000.00</b>	<b>54265.73</b>	<b>2734.27</b>	<b>5000.00</b>	<b>65000.00</b>	<b>56000.00</b>	<b>55661.83</b>	<b>338.17</b>	<b>9000.00</b>

Services	2003-04 (NET)					2004-05 (NET)					2005-06 (NET)
	BE	RE	Actual	Shortfall (RE-Actual)	Surrender (BE-RE)	BE	RE	Actual	Shortfall (RE-Actual)	Surrender (BE-RE)	BE
Army	34202.53	32287.52	33199.98	-912.46	1915.01	36277.50	35888.52				40288.32
Navy	11980.66	10413.75	10109.35	304.40	1566.91	13149.97	13327.50				15253.00
Air Force	15419.32	13957.96	13187.02	770.94	1461.36	23270.53	23783.82				21808.76
DGOF	-366.41	-210.99	-210.58	-0.41	-155.42	-139.58	-158.78				-127.94
R&D	3647.60	3458.24	3443.18	15.06	189.36	4000.94	3747.12				5356.34
DGQA	416.30	393.52	336.85	56.67	22.78	440.64	411.82				421.52
<b>Grand Total</b>	<b>65300.00</b>	<b>60300.00</b>	<b>60065.80</b>	<b>234.20</b>	<b>5000.00</b>	<b>77000.00</b>	<b>77000.00</b>				<b>83000.00</b>

1.29 The Standing Committee on Defence during their sittings held on 21,22,24 March 2005, 2 and 7 April 2005 have examined and deliberated on various issues pertaining to the Demands for Grants of Ministry of Defence and Defence Services and also delved inter alia on the following issues:

#### Impact of expenditure cut on Defence Preparedness

1.30 The representatives of the Ministry of Defence in their deposition before the Committee have stated that the austerity instructions of Ministry of Finance have inter alia entailed a mandatory cut in the Budgetary Allocation for non plan non salary expenditure as well as the expenditure on petrol/oil/lubricants and travel; revision of non-tax receipts so as to

ensure recovery of the cost of services; ban on the creation of posts, reduction in the number of sanctioned posts; restrictions on purchase of new vehicles; restrictions on foreign travel and on entertainment/hospitality expenses; review by the administrative Ministries/Departments of release of funds to those Autonomous Institutions having substantial balances utilized with them and kept in deposit with the Banks, reduction in a graded manner or release of deficit grants to those Autonomous Institutions which have potential of raising funds.

1.31 Elaborating further on the issue a representative of the Ministry of Defence inter alia stated as under:

“When we say shortages of ‘human resource’, we are referring to shortages across the board. It is categorized in different categories, shortages in the Officers cadre, shortages in the sailors cadre and shortages in the civilian cadre – the three different cadres. But, overall, there is a shortage.

10 per cent cut applies across the board to all the categories of civilian manpower. We are not allowed to fill up the posts even if we have vacancies available to us. As and when the posts fall vacant, we are not allowed to fill them up. This is the Government’s policy and therefore, we have to cut down on the manpower across the board. The point at this stage which would help considerably is that, at least, all the new acquisitions which we make, particularly when it comes to major acquisitions or a big project like the Karwar Naval Base, then we cannot operationalise those assets unless we have the requisite manpower available to us.

The other issue is that the technical manpower takes a long time to train before it becomes useful. So, if the Base is to be commissioned, say, next year, it does not help to recruit the manpower at this stage. It should have been done three or four years earlier. It would help considerably if for the new projects, we are given the requisite manpower at the time of sanction. For replacements, for which if there is some old asset which is being paid off, then we are showing savings in any case before we ask for the manpower”.

1.32 The Defence Secretary while explaining the cumulative affect of the pruning of Defence expenditure has stated that :

“Over a period of time the vacancies or shortages have built up to a stage that it became 10 plus 10, 20 per cent. But it should not have. As I explained, the Navy is heavily dependent upon the civilian manpower for its dockyards and there are technical people, the bulk of them. Secondly, for example, there are two major establishments which are going to be readied shortly”.

1.33 Regarding the Ministry’s endeavours to change the perception of Ministry of Finance and lift the restrictions on recruitment, the Defence Secretary has added that :

“It is not on account of lack of efforts on the part of us in the Ministry of Defence. We have been trying to persuade the Ministry of Finance that the Navy should be allowed to recruit. As the hon. Chairman was saying, the Defence forces should not be treated at par with any other civilian organisation. However, till now we have not succeeded”.

1.34 The Secretary, Defence (Finance) supplementing on the above stated as under:

“In addition to the last directive, the Ministry of Finance said that if three people retire, only one will be recruited. This has to be done for the next five years. That is why Navy has to come to a stage where they are now. They had already shortages because earlier they were not allowed to fill up the posts”.

1.35 Replying to a query whether the Ministry down sizes the funds at RE stage on its own or it is done as per the directives of the Ministry of Finance, the Secretary Defence Finance has stated that:

“It is not that we were not able to spend but we were asked to surrender”.

1.36 Supporting the above contention, the Defence Secretary has further stated that :

“Last year we had got these committed liabilities. They had their deficit problems. So they said that we will take about Rs. 5000 crore out of your budget. We told them that this is our committed burden and all these things will pass on to the next year”.

1.37 With reference to a question regarding our capabilities to meet any threat in the region, the Defence Secretary has stated that:

“I presume the question is about our capabilities vis-à-vis our immediate neighbour on all sides. There again, with individual neighbours the kind of deployment and forces they had or likely to or capable of deploying, we feel confident enough to be able to face that. However, if one or more of these neighbours were to combine their efforts and to pose a joint threat, then it would introduce some element of uncertainty or complications. Even there to some extent, we are able to handle than but then the neighbours also have their neighbours. Therefore, it is no inconceivable that they would get assistance from others. Therefore, in these kinds of things, there are a number of imponderables. But as far as the present assessment against the immediate neighbour on either side of our country is concerned, we feel that we can take on a threat without compromising on our security or territory or in any case to be able to inflict more damage to the other side so as to see that we are not divorce of”.

1.38 Responding to a related written query regarding the expenditure of the neighbouring countries on Defence Services, the Ministry has furnished the following information:

“The comparison of Defence expenditure of neighbouring and other developed countries with our defence expenditure is difficult due to lack of clear demarcation between Civil and Defence spending in various countries. Another problem with realistic comparisons is that similar accounts of resources do not yield identical results. However, as per the publication “Military Balance 2004-2005”, the defence expenditure as a percentage of GDP of India, neighbouring and other developed countries during the last three years is as under (vis-à-vis their respective GDPs):

COUNTRY	% AGE SHARE OF GDP		
	2001	2002	2003
INDIA	2.9	2.7	2.6
US	3.0	3.3	3.7
UK	2.5	2.4	2.4
PAKISTAN	4.4	4.4	4.5
CHINA	3.7	4.1	3.9
RUSSIA	4.5	4.8	4.9
ISRAEL	9.6	9.3	9.5
SRI LANKA	5.1	3.1	2.8
INDONESIA	3.0	3.0	3.0
MALAYSIA	2.2	2.3	2.3

The comparison of Defence expenditure as a percentage of Central Government expenditure in respect of other countries is, however, not available”.

- 1.39** The Committee are deeply concerned to note that the Ministry of Defence was compelled to surrender funds to the tune of Rs. 5,000 crore, Rs. 9,000 crore and Rs. 5,000 crore at the Revised Estimates stage of 2001-02, 2002-03 and 2003-04 respectively, to meet the deficits. The budgetary ceilings imposed by the Ministry of Finance in the year 2005-06 have led to the downsizing of the total projected capital requirements of the Defence Services from adequately Rs. 44123.86 crore to Rs. 34375.14 crore which fails to address the security concerns of the nation. The arbitrary caps on budget utilization over a period of time have taken a toll of almost all sectors of Defence like manpower in the Navy, the ongoing modernization, infrastructure development, procurement of equipment/ acquisitions, indigenisation and R&D initiatives. The across the board cut applied by the Ministry of Finance on Defence expenditure without undertaking any exercise to check the ramifications of their decision on defence preparedness calls for an immediate review. The Committee feel that there should not be any cut or reduction in the defence budget by the Ministry of Finance at any stage.
- 1.40** Closely related to the issue of Defence Preparedness and the ability to meet the threat perception is the quantum of funds available to our services. It is seen from the above that our Defence allocations as a percentage share of GDP since 1988-89 (year wise) have been between around 2 to 3 percent. However, considering the present defence expenditure of some of our neighbours and the present security scenario, the Committee feel that there is a need to fix a minimum percentage of our GDP which should be made available to defence forces at all costs every year. The Committee are aware of the fact that the precarious finances entail the Government to consciously fixed the level of Defence expenditure as a percentage of GDP after assessing the prevailing the threat perceptions and the present and future operational and modernization requirements of the services.
- 1.41** The Committee, therefore, strongly recommends that 10% cut applied by the Ministry of Finance across the board over the years should be immediately reviewed to check further depletions of our Military assets. The Committee



**also desire that the Ministry of Defence should re-priorities their plans to ensure the optimum utilization of the available assets.**

- 1.42 The Committee are surprise to observe that in spite of its earlier recommendation, which was agreed to by the Government on setting up of Defence University i.e. National Institute for Defence and Strategic Studies/Central Defence University, No budget provision is made in this budget. The Committee strongly feel that this may be made on priority.**

## **CHAPTER - II**

### **DEFENCE PLANNING**

2.1 As regards the planning process, the Government has taken a number of measures to improve the structure, process and procedure relating to defence planning based on the recommendations of Group of Ministers on 'Reforming the National Security System'. The preparation of Long Term Plans, Five Year Defence Plans and Annual Budgetary proposals have been brought under the newly established Integrated Defence Staff (IDS) to bring about greater inter-service co-ordination in planning. The IDS also interacts closely with Defence (Finance) in the formulation of Plans and Budgets.

2.2 The Government has set up a Defence Acquisition Council headed by the Raksha Mantri and consisting of Raksha Rajya Mantri (s), the three Service Chiefs and Defence Secretary, Secretary (Defence Finance), and Secretary (Defence Production) to assist the Raksha Mantri in taking decisions in the totality of the new planning process, including capital acquisitions and major modernisation projects. The Government has also set up a dedicated institutional structure for defence procurement, the Defence procurement Board, headed by the Defence Secretary for acquisitions on the capital account. Planning processes have been further tightened under budgetary pressures and the need to establish greater synergy and jointness amongst the Armed Forces. This has also necessitated greater co-ordination in planning and procurement among the three services.

2.3 The Ministry in its written note submitted on the current status of the implementation of the 10<sup>th</sup> Plan has inter alia stated that:

“The projections of the Ministry of Defence for the Tenth Defence Plan were reviewed thrice between March 2003 and July 2004 bearing in mind the needs of defence modernization and the likely constraints to the availability of funds for defence in the Tenth Plan. The Ministry of Finance have now agreed in principle to the latest projection made by the Ministry of Defence of Rs. 4,18,101 crore. However, a firm indication of annual outlays for the remaining year of the 10<sup>th</sup> Plan has not yet been given by the Ministry of Finance.

Meanwhile, in the absence of a formal approval of the allocation for defence in the Tenth Plan, defence planning has been harmonised with the allotments for defence in the annual budgets of the Government. Actual expenditures in 2002-2003 and 2003-2004 were Rs. 55,620 crores and Rs. 60,300 crores respectively. An allocation of Rs. 77,200 crores has been made in the Budget Estimate for 2004-2005 against a

projection of Rs. 90,928 crores. About, Rs. 11,000 crores additional funds have been allocated beyond the Budget Estimate for the capital head.

The projected expenditure in 2005-2006 and 2006-2007 are Rs. 1,00,960 crores and Rs. 1,10,251 crores respectively. However, an amount of Rs. 83,000 crores only has been allocated in the Budget Estimate (B.E.) for the current financial year 2005-2006.

While some compromises are inevitable in the absence of a formally approved Plan, every effort has been made to ensure that the annual budgets have been utilized in accordance with the Plan projections of the Ministry of Defence and that any negative impact on ongoing modernization, infrastructure development and procurements of equipment is minimized. Ongoing projects and commitments have been reviewed and prioritized so that the main objective of the Tenth Defence Plan to carry forward the process of modernization of the Armed Forces is not adversely affected. A modest outlay of over Rs. 950 crores has been made for new schemes for the Army. (No increase is being sought)".

2.4 In response to a query regarding the existence of a core plan the Ministry though a written reply has inter alia stated that :

"There is no formal draft core plan to make up for the delay in the finalization of the Tenth Defence Plan. Meanwhile, in the absence of a formal approval of the allocation for defence in the Tenth Plan, defence planning has been harmonised with the allotments for defence in the annual budgets of the Government. While, indigenous production /Research and Development is being made in accordance with the decisions flowing from the Defence Acquisition Council, defence procurement is being made in accordance with annual acquisition plans for the three services as approved by the Defence Procurement Board. Adequate measures have been taken to minimise any adverse effect on ongoing modernisation schemes. On-going projects and contractual commitments have been reviewed and prioritised to minimise the effect of any shortfall in actual allocation vis-à-vis projections, both in respect of modernisation plans and in essential procurement. Keeping in view, the rising competing demands on limited resources, the budgetary framework has been fine-tuned in such a manner to ensure most effective utilisation of Government resources".

2.5 While presenting a detailed picture on the entire planning exercise that has been undertaken in the recent past, the representative of Ministry has stated as under:

“In the year 2001-02, projections for the 10<sup>th</sup> Plan were examined in the Ministry of Defence. These projections were made by the different Services and the Departments. They added up to Rs. 4.97 lakh crore. In January, 2002 the Ministry of Finance indicated the likely availability of Rs. 4.21 lakh crore. So, there was a gap of about Rs. 75,000 crore. Therefore, the Chief of Integrated Defence Staff and Chief of Staff were requested for giving their views. They recommended slightly reduced allocation of Rs. 4.61 lakh crore. In February 2003, in consonance with the recommendations, it was done. The matter was again taken up with the Finance Ministry in March 2003. But we did not have received any response from them thereafter.

We had to carry out a review of our projections. This was because if some scheme was supposed to be sanctioned in the first year of the Plan, it will involve expenditure in the first, second, third years and leading up to the fifth year. If, for the first two years, projected allocations are not utilized, there is no way the original amount, which was projected for the entire five years could be spent in the last three years.

It is because in defence acquisition, we are not really buying things off the shelf and paying out for the whole thing. So, if you take a case of some scheme or project costing Rs. 5,000 crore in five years with simplistic allocation of expenditure of Rs. 1,000 crore each year, and if in the first two years, it is not sanctioned and in the third year it is sanctioned, we are not going to have anything in the first two years, but the expenditure will be Rs.3,000 crore in the remaining three years and not Rs. 5,000 crore. When we received the projects, we reviewed what would be and what would not be sanctioned. Then the revised figures came to something like Rs. 4,18,000 crore as indicated. But they did not give us any annual allocations, not capacity utilization, etc”.

2.6 On the lessons learnt and the measures that are being implemented to overcome the nagging delays of Defence Planning, the Defence Secretary deposed that :

“Presentation of the fourth year Budget is made to the Parliament. As has already been mentioned, there is the Ministry of Defence and there is the Ministry of Finance which are the players in this exercise. The exercise for preparing the plan is undertaken by us well in time, much before the start of the year in which the next Five Year Plan is going to start. For example, for the 11<sup>th</sup> Plan, to answer your question, we have already started the exercise. For doing that planning as to what would be needed, considering the gaps that is there in the Tenth Plan – if any exercise of this nature is to be undertaken – we might have a wish list; it might represent a large figure. But we still have to have some kind of an indicative figure from the Ministry of Finance saying that we have asked for this much amount, which may not be available, but we can have so

much amount at the outer limit, beyond which we cannot go. This kind of an indication is no forthcoming. This is what happened in this current year. If you contrast it with the situation of the Ninth Plan, as the Chairman was enquiring, the Ninth Plan was approved on 1<sup>st</sup> January, 1998.

Therefore, it was approved in the first year. It was a very major achievement and they indicated a total allocation of Rs. 2,20,000 crore. The Annual Budget, as it took place during those five years if you total up those they came to Rs. 2,43,000 crore. That means the annual allocation was more than the indicative figure of the Plan. That was a situation which was quite in contrast to what is prevalent just now where, firstly, the figure itself was not known to us till December – finally what we wanted and how much they can give. This went till December of 2004. If we were to juxtapose the Tenth Plan indicative figure of Rs. 4,18,000 crore divided by four years, which are known, it is nowhere. There was no relation. Therefore, this figure becomes an academic figure. That is the point that we have been discussing, that is the outlays have to be finalized at the beginning of the plan and secondly Annual Allocation should be conforming to the overall outlay”.

2.7 Adding further on the issue, the Defence Secretary has also stated that :

“As has been mentioned earlier, how initial projections of Rs. 4,97,000 crore was done at the beginning of the Tenth Plan (2001-02). This was also communicated to the Finance Ministry with the break up. They needed it in a particular format. It was given in that format. Subsequently, they had indicated Rs. 4,97,000 crore is too much and we may plan within Rs. 4,21,000 crore. There was a gap of about Rs. 75,724 between the projection and what they had indicated. By that time certain time had elapsed. We were involved in an internal exercise of readjusting. In December 2004 they indicated Rs. 4,18,000 crore, which was what we had projected earlier”.

2.8 Explaining the details of the ongoing measures to formulate the Eleventh Defence Plan and how these initiatives have a bearing on the implementation of annual plan programmes, the Defence Secretary has briefed the Committee :

“As I just said, we have started our exercise of preparing the Eleventh Plan which means that the Integrated Defence Staff which gets inputs from all the three Headquarters puts together the long-term perspective plan requirements of each service and makes them into one composite plan called the Defence Plan. It sees whether there is any overlapping of capabilities or whether there is any repetition or commonalties. So, it does such modifications and vetting and then it is projecting that requirement to the Ministry where we see whether it is all right or whether it needs any change or not.. Accordingly, we pass it on to the Ministry of Finance for approval. Of course, we have discussions with the Ministry of Finance because they might also like to understand the details. So, that dialogue is there. Our request is, if the Ministry of Finance were to give its indications well before the start of the first year of the Eleventh Plan, then that would help everybody to know what is going to be the situation during the five years of the Eleventh Plan. Secondly, we do need some kind of a figure to show that this is the total figure and whatever amount it might be would be divided in the five years in this fashion in the Annual Budget so that the Annual programmes can then be fine tuned to adjust to the availability. Otherwise, there is likely to be a mismatch between what we might project and the money availability”.

2.9 When asked whether the Ministry of Finance had intimated the details of the 10<sup>th</sup> Plan allocations in time, the Defence Secretary has stated that :

“It was towards the end of the third year. This was one part of the problem. The second part, as I said, is annual allocations are nowhere matching even this figure. Therefore, how do we do the Planning? We do not know what will be the figure for the fifth plan. Budget has been submitted for the fourth year. It totals up to Rs. 2 lakh something”.

2.10 The Ministry of Defence in its written Action Taken Reply on the recommendation of the Committee on long term planning of three Services contained in the First Report on Demands for Grants of the Ministry of Defence for the year 2004-05, has stated as under :

“A draft Long-Term Integrated Perspective Plan (LTIPP) covering the 15-year period from the Tenth to the Twelfth Plan (2002-2017) was formulated in June 2004 in consultation with the three Services. Since more than two years of the current Tenth Plan period have already elapsed, a new approach paper has been made formulating a Long Term Integrated Perspective Plan (LTIPP) covering the period from 2007-2022. This Plan is expected to be finalised by the Integrated Defence Staff by the last quarter of 2005.”

- 2.11** The Committee are unhappy to note that the Ministry of Finance has failed to finalise the 10<sup>th</sup> Defence plan even after three years of the plan have passed. Non-finalisation of the 10<sup>th</sup> Defence Plan at its beginning by the Ministry of Finance has created a great deal of uncertainty about the availability of adequate finance for the acquisition of the vital equipment, modernization, etc. The Ministry of Defence had projected a demand of Rs. 4,97,000 crore in 2001 for the Tenth Plan. However, the Ministry of Finance has given indicative figure of Rs.4, 18,000 crore in December 2004, without any firm commitment. The total allocations in the first four years of Tenth Defence Plan just come to about Rs.2, 76,300 crore which is nowhere near their requirements. This gap between the demand and allocations, has adversely affected the defence planning and our preparedness. The Committee take a serious note of this and want the Government to finalise the Tenth Plan immediately and take steps to utilise the committed amount in full. The Committee would like to be apprised of the finalisation of the Plan as well as the follow-up steps being taken to utilise the total allocation of the Tenth Plan.
- 2.12** The Committee also observe that due to non-finalisation of the Tenth Plan in time, the long term perspective plan of the Forces has got affected and is presently at the finalisation stage with a revised plan schedule spanning from 2007-2022. The Committee, while expressing their displeasure over the present situation, recommend that the Ministry of Defence should reorient the plans and strive to adhere to the schedules envisaged. As regard the 11<sup>th</sup> Plan, the Committee desire that it should be finalised at least an year before the plan period starts.
- 2.13** It is high time that the Government prepared a road map for self-reliance. The Committee strongly feels that India should not be taken as a weapons/arms market by the global suppliers and action in this direction should be visible by the end of Tenth Defence Plan and 11<sup>th</sup> Plan should entirely be devoted to self-reliance.
- 2.14** The Committee has also observed that the surveillance capabilities of our forces are inadequate. This is primarily due to non-availability of low-level radar



**systems with the three services. The Committee feel that all round effort should be undertaken by the Government to ensure that the entire country is covered. The Committee feel that the Ministry should explore all possibilities of acquiring the required radar systems in adequate numbers without any delay.**

### **CHIEF OF DEFENCE STAFF (CDS)**

2.15 The Ministerial Committee on National Security had recommended in February 2001 for the creation of the post of Chief of Defence Staff (CDS). When enquired about the present status in this regard, the Ministry of Defence has stated that the Government had constituted a group of Ministers (GoM) on 17 April 2000 to thoroughly review the national security system in its entirety and in particular, to consider the recommendations of the Kargil Review Committee. The GoM had after careful consideration of various issues formulated a comprehensive Report titled 'Reforming the National Security System'. The GoM had inter-alia recommended establishment of the Chief of Defence Staff (CDS).

2.16 The recommendations of the GoM were approved by the Government. The Government have not yet come to decision on the post of CDS. Meanwhile, a number of steps have been taken to promote 'synergy' among the Armed Forces, improve inter service coordination on the one hand the Services and the Ministry of Defence on the other, this would bring about optimal utilisation of resources and strengthen the higher defence management.

2.17 Pending a decision on the creation of the post of Chief of Defence Staff (CDS), an Integrated Defence Staff has been set up under a Chief of Integrated Defence staff to the Chiefs of Staff Committee (CISC) to support the Chiefs of Staff Committee and its Chairman in the optimum performance of its roles and functions and bringing together and coordinating several functions common to the Services or involving more than one Service. Tri-Service bodies promoting 'jointness' and 'synergy' among the Armed Forces have also been set up like the Defence Intelligence Agency (DIA), the Strategic Forces Command (SFC) and India's first 'theatre' command, the Andaman & Nicobar Command. Individual Service Headquarters have been re-designated as part of the 'Integrated Headquarters of the Ministry of Defence'. Administrative and Financial powers have also been delegated from the Ministry of Defence to the Integrated Headquarters to promote expeditious decision-making. These steps are expected to enhance the capabilities of the Armed Forces significantly.

2.18 Countries with posts of Chief of Defence Staff or similar or comparable systems include the institutions of the Joint Chief of Staff of the USA, the Chief of Defence Staff of the UK, Chief of Defence Forces of Australia, and the Chief of General Staff of China, amongst others.

2.19 The Committee on Defence, keeping in view excellent work performed by the armed forces in handling of the rescue and relief operation, in their Action Taken Report on Demands for Grants (2004-05) have recommended that the post of Chief of Defence Staff is very much essential for better management of security.

2.20 The Defence Expert also, who appeared before the Committee, while tendering oral evidence has supported the rationale for creating the post of Chief of Defence Staff. During the course of deposition he inter-alia stated as under :

“All these benefits are lost because we have not appointed. We have taken time to appoint Chairman of the Chief of Staff Committee. Therefore, that should be done early.

We are losing time as well as the benefits of having the integrated staff and planning because we have not appointed Chiefs of Staff Committee Chairman.”

- 2.21** The Committee are constrained to note that despite their repeated recommendations in the past for establishment of the Chief of Defence Staff (CDS), Government has not yet come to any decision on the creation of the post even after more than three years has elapsed. The Committee further note that in the existing structure for higher defence management viz. the Chief of Staff Committee had not been able to optimally perform their role and functions in bringing together and promoting co-ordination amongst the Services.
- 2.22** The Committee feel that keeping in view the security scenario of the country and in order to provide single military advice to the Government and to give administer strategic forces and to enhance the efficiency and effectiveness of the planning process, there is an imperative need to create the post of CDS to provide a focal point for better co-ordination among the three services in the long term perspective plan in conventional and strategic capabilities, prioritise R & D activities and provide effective coordination leading to the path of self-reliance.
- The Committee desire that Government should give serious consideration to the recommendations of the Committee.

### CHAPTER-III

#### ARMY

3.1 The total allocation (Revenue Expenditure) made to the Army in the Budget Estimates 2004-05 was 27815.07 crore which registered an increase of approximately Rs. 1100 crore at the Revised Estimates (RE) stage making it to Rs. 28914.83 crore. In the Budget Estimates (BE) 2005-06 the allocation to Army has increased to Rs. 31228.37 crore.

3.2 On the Capital Account the allocation for the Army in the Budget Estimates 2004-05 was Rs. 8831.86 crore which was reduced to Rs. 7317.80 crore. The allocation in the BE 2005-06 on the Capital Account has been put at Rs. 9418.64 crore thus showing an increase of Rs. 2100 crore.

#### **Modernisation of Indian Army**

3.3 The Armed Forces of India are responsible for defending the country against external aggression and safeguarding the territorial integrity of the nation. The Indian Army has to be extremely vigilant at all times to meet various challenges along the borders of the country encompassing different geographical and climatic conditions. Keeping in view the threat perceptions, advances in technology and geo-political environment, the Indian Army is suitably structured, equipped and trained to effectively perform its tasks. Efforts are always continued to modernise and upgrade the weapons and weapon systems of the Army to prepare it to address the requirements of modern day warfare, and enhance its combat efficiency. Following are some of the notable efforts:-

- (i) **Armoured Corps:** As a part of the effort to equip the Armoured Corps with night fighting capabilities. Thermal Imager Based Stand Alone Sight and Thermal Imager Fire Control System for the T-72 Tanks are under process for procurement. Image Intensification Based Sights for the drivers of T-72 Tanks and Image Intensification Based Sights for the commanders, gunners and drivers of T-55 Tanks are undergoing trials and evaluation as part of the procurement process. Armoured Recovery Vehicle have also been contracted for procurement.
- (ii) **Mechanised Infantry:-** To enhance the combat efficiency, Konkurs-M Anti-Tank Guided Missiles have been acquired along with transfer of technology. Anti-tank Guided Missile Launchers of the Infantry Combat vehicle BMP-II are being equipped

with the Thermal Imaging sights to enhance night-fighting capability. Image Intensification based Night Vision Devices for the drivers of BMPs are also in the process of procurement.

- (iii) **Artillery:-** To enhance the fire-power of the Army, efforts are being made of equip them with 155 mm Artillery Gun, for employment in various types of terrain. Besides, trials have been successfully completed for the Multi- barrel Rocket Launchers. Trial Evaluation of the latest Artillery Ammunition System for induction viz Terminally Guided Munitions, Velocity Enhanced Long Range Artillery Projectiles and anti - radiation Ammunition is also in progress. Moreover, to enhance the Surveillance Capability of the Army, considerable progress has been made in the direction of acquisition of Long Range Reconnaissance and Observation System, Weapon Locating Radar and Unmanned Aerial Vehicle.
- (iv) **Air Defence Artillery:-** The negotiations for induction of improved version of Tunguska M1 Weapon system in Air Defence Artillery units of strike/ mechanised formations are going on. Air Target System 'Lakshya' , developed by Aeronautical Development Establishment (ADE) of DRDO has also been recently evaluated by the Army and will be used for practice firing of Air Defence Weapon Systems. In conjunction with the IAF, a revamp of the existing Control and Reporting System of Air Defence Artillery is being carried out. The thrust is towards automation of various warning and control systems and processes. A review of the requirement of modern Air Defence Weapon System has been carried out to replace the obsolescent equipment in a phased manner to enable it to meet emerging air threats.
- (v) **Infantry:-** The combat potential, surveillance and counter- insurgency capability of the Infantry is being significantly improved by acquisition of following equipment and weapon systems:-
  - (a) **Fire Power:-** 20 mm Calibre and 14.5 mm Calibre Anti Material Rifles, Automatic Grenade Launcher-30, Multiple Grenade Launcher, 84 mm MM Rocket Launcher MK II and Kornet –E Anti-Tank Guided Missile are under procurement.
  - (b) **Surveillance Devices:-** Battle field Surveillance Radars (BFRS), Hand-Held Thermal Imagers (HHTI) and various types of Unattended Ground Sensors (UGS) have been procured for surveillance in conventional and counter- insurgency roles and to monitor the intrusion across the Line of Control/ Actual Ground Position Line.

- (c) **Mobility:-** A family of High- Mobility Vehicles, Bullet-Proof Vehicles and Anti-Tank Guided-Missile Vehicle are being procured to improve the mobility of the infantry.
- (vi) **Signals:-** Procurement of state-of-the-art communication equipment and system has brought about substantial qualitative improvements in the communications capability of the Army. Some of the major procurements are: RS HX long-range frequency-hopping high-frequency radio sets, Hand-Held Walkie-Talkie Radio Sets, Interception Receiver AR 5000, Radio Set 5 Watt/ 20 Watt VHF, and Radio Set 5 Watt/ 20 Watt VHF for Armoured Fighting Vehicles. A country wide – secured value-added backbone data network is also being established connecting the important Formation headquarters of the Army.
- (vii) **Engineers:-** After withdrawal of forces from the border, equipment to assist de-mining operations, have been procured to minimise the casualties. Trials and procurement of various equipment's is also underway which will improve capability for disaster-management during a nuclear, chemical and biological warfare scenario. Army's capability to fight against insurgency/ terrorism has been considerably bolstered by equipping them with more equipment.

In written reply to a clarification sought by the Committee in regard to the functioning and performance of recently inducted Arjun Tank, the Ministry have furnished the following details:-

The project on development of MBT Arjun was initially sanctioned in May 1974 at a cost of Rs. 15.50 Cr with a PDC of 10 years. Time and cost have undergone revision on 3 occasions (in 1980, 1987 and 2000).

The reason for revision in cost and time are-major changes in qualitative requirements, delay in import of sub-systems due to import embargoes, increase in number of prototypes, manufacture of pre-production series tanks, long and extended user trials, difficulties in organising for field evaluation, general inflation and devaluation of rupee etc. Milestone related progress on MBT Arjun is mentioned in the enclosed table.

S. No	Date	Dev.cost/Revised cost in Cr.	Milestones	Approach and Achievements.
1.	May 1974	15.50	Initiation of work on development of MBT as per GSQR No.326.	Designed and developed prototype vehicle. System integration with imported components.
2.	Oct. 1980	56.50	GSQR Changed, No.431	Now design and system integration as futuristic battle tank incorporating advanced features.
3.	May 1987	280.80	Second GSQR change in 1985, No. 467.	-Undertook development of 12 prototypes of MBT Arjun -After development, tanks were run for more than 20,000 km and test fired 3000 rounds of ammunition.
4.	1993	-----	Scope of project included 12 no. of prototypes and	-After proving the design, additional 15 PPS tanks were designed incorporating modifications desired by users. 6 PPS tanks given to user for user-cum-troop trials in 1993 and 8 more PPS tanks were handed over subsequently between June 1994 to June 1996.
5.	1996	-----	15 Pre production series tanks.	-15 <sup>th</sup> PPS tank was cleared as reference tank for production series in 1996. -PPS tanks covered more than 70000 km of auto-motive trials and fired 7000 rounds averaging 4600 km run and 460 rounds per tank. - Major imported system in the tank is power back, gun control system and gunners main sight. - Cost wise import content in MBT will be 45% for manufacture of 200 tanks and under 30% for 500 tanks.
6.	Sep. 2000	305.60 (Revised at the time of closure)	Trial evaluation completed.	Project closed in 2000.
7.	Mar.2000	-----	Army placed indent for manufacture of 124 Arjun Tanks.	Ordnance factory, HVF Avadi started setting up of infrastructure and commencement of manufacturing.
8.	2004-onwards	-----	Commencement of bulk production and delivery schedule: -2004-05 : 14 Nos. - 2005-06 : 25 Nos. - 2006-07 : 40 Nos. - 2007-08 : 45 Nos.	Five number of production series tanks handed over to Army and remaining are in the process.



MBT Arjun has been indigenously designed and developed as per the General Staff Qualitative Requirement (GSQR) given by the Army. It has been tested and evaluated exhaustively by the Army (user) in all types of terrains and weather conditions for more than a decade.

Various modifications suggested by the user, during pre-induction trials, have been systematically attended to and the performance of the tank improved as laid down in the GSQR.

The confidence of the Users in MBT Arjun is reflected very well, as they have already placed an order on DGOF for manufacture of 124 Nos. of ARJUN tanks.

3.4 During the presentation on the modernisation plans of the Indian Army, a representative of the Ministry of Defence provided detailed information as outlined below :

“Modernisation is an ongoing process and sometimes mid-course corrections may become necessary to be undertaken because of the availability of various kinds of technologies or even changes in the overall geo-strategic perceptions and requirements of relevant force structures, the thrust we have given in the Tenth Plan is primarily to modernise the infantry battalions and the special forces. Our infantry battalions and special forces, for a long time since the 60’s, had no major modernisation of their equipment and structures. So, this was given the highest priority by the Chief of the Army Staff.

Thereafter, we wanted our mechanised forces to be able to fight at night. Fighting by night has become a norm today in modern warfare and the removal of night blindness was given the next kind of priority. Then there is the refurbishment of our medium artillery. As you would be aware, a bulk of our artillery comprises of very vintage 130 millimetre guns which were there from the 60’s other than the Bofors of 155 millimetre calibre. So, a refurbishment of medium artillery will continue to mark our efforts right up to the end of Twelfth Plan and beyond. Balanced modernisation of other arms and services and making up of deficiencies is what we call a hollowness in our structure”.

3.5 As regard the capability being looked for each arms, representative of the Ministry deposed as under:

“I will take this up arm by arm and indicate to the Hon. Standing Committee as to what is the capability that we are looking for each of the arms. What are the kind of equipment we are providing to them?”

The capability accretions in the infantry battalions that we are looking at is that they must be able to exercise surveillance up to a distance of three kilometres in front of their forward line. Their present capabilities or earlier capabilities were around 300 metres the distance that they could look through a binocular. We have already upgraded it and are continuing to upgrade it to achieve this target. This is the first point.

Secondly, I will come at detection of infiltration by troops or vehicles in areas not physically held. Since, low intensity operations have become the most probable kind of warfare that we continue to fight, this will be an extremely important capability.

Thirdly, I will come to destroying targets like vehicles, stores dumps and troop clusters up to a distance of 1,500 metres, destroy tanks by day up to four kilometres and by night up to two kilometres. Our earlier capabilities were limited to around two kilometres.

Fourthly, I will come to the point as to how to neutralise enemy commanders and other important personnel, communication down to section level and protected personnel and protected movement through insurgent held areas”

3.6 As regards the kind of equipment being procured representative of the Ministry further stated that :

“I will now indicate what are the various kinds of equipment we are procuring to achieve these objectives. Firstly, I will come to surveillance and target acquisition. Handheld Thermal Imagers are being inducted in all infantry battalions. Initially, these were important but now these are being manufactured by Bharat Electronics Limited.

Secondly, I will come to Battle Field Surveillance Radars which can look up to three kilometres. Initially, these were imported but now these are being manufactured by Bharat Electronics Limited.

Thirdly, regarding High Resolution Binoculars, initially they were imported but now transfer of technology is being given to the ordnance factories.

Fourthly comes the Night Vision Devices for Motor Fire Controllers. We have purchased this kind of equipment for our artillery earlier. The same kind of equipment is now being provided for the Motor Fire Controllers. Initially, these were imported but now an Indian private sector firm has entered into a joint venture with that particular company.

Then there are Unattended Ground Sensors. We have purchased these from NALCO who have obtained the technology from abroad.

Then, Sir, comes the question of Spotter Scope with digital camera. This enables you to take digital photographs of things observed through the scope.

Then there is a Thermal Imaging Sight for ATGH Launch. This will enable the ATGHs to fire in the night. Passive night vision devices and goggles are being procured on a large scale for the infantry battalions.....

As far as communication is concerned, hand-held radio sets are being given down to section level. As far as Special Forces are concerned, 40 items of various kinds were identified for modernisation.

3.7 As regard the mechanised forces, representative of the Ministry stated:

“Now, I am shifting to the Mechanised Forces. The basic capability that we are looking at was that there should be an adequate proportion of state of the art. It is with the basic thrust that 30 per cent of our equipment should be state of the art, 40 per cent should be with what is in current, and the remaining 30 per cent should be obsolescent. We also wanted to give new lease of life for older tanks like T-72s, We have embarked on an upgradation programme for these tanks. For the equipment side, we are looking for induction of T-90 and Arjun Tanks. As far as Thermal Imaging and Image Intensifier are being given to the Ordnance Factory at Dehradun. Initially, we have procured a small quantity Thermal Imaging Sights, and the remaining are being obtained with transfer of technology from OEMs for their production in India. I might say that Thermal Imaging is a technology which most of the countries were in possession of. Now, they are very cheery for passing them out.

We are also upgrading T-72 tanks, Indian armaments, etc. We have planned for introduction of the Nag, Anti-Tank Guided Missile, and for reliable radio communications”.

- 3.8** The Committee note that modernisation of Armed Forces is a continuous process which requires long term planning and huge investments. The Ministry of Defence have undertaken a plan to modernise the Indian Army and to equip with the latest machine and equipment so that it can meet the security requirements of the country. The Committee note that during the three years of the Tenth Plan period, the stress primarily was on the modernisation of the infantry battalions and the special forces. The Committee further note that as far as special forces are concerned, 40 items of various kinds have been identified for modernisation. Efforts are being made to modernise and upgrade the weapons and weapon systems of the Army to prepare it to address the requirements of modern day warfare. These efforts cover the ability to exercise surveillance up to a distance of *three kilometres of infantry battalion* detection of infiltration by troops or vehicles in areas not physically held, destroying targets like vehicles, stores dumps and troop clusters, neutralise enemy commanders, various kinds of equipment, Battle Field Surveillance Radars, High Resolution Binoculars, Night Vision Devices, Thermal Imaging Sight for ATGM Launch, Mechanised Forces and their equipments, induction of T-90 and Arjun Tanks and T-72 Tanks.
- 3.9** From the presentation made by the Army before the Committee, it is observed that the number and type of weapons available with the Army are much less as compared to their requirements.
- 3.10** The Committee, therefore, keeping in view the threat perceptions, advances in technology with special emphasis on Information Technology and geo-political

environment, strongly recommend that there is an imperative need to prepare a long term policy to modernise the Indian Army and upgrade their weapon systems in areas identified by the Army and desire that a time bound programme should be drawn to acquire those weapons etc. and also ensure proper financial allocations for the purpose. The Committee desire that the quality of the equipment etc. should be the best available in the market which can enhance the combat efficiency of the soldiers in an effective manner. The Committee feel that our priority should be to equip the infantry man with superior light weight weapons and equipment & clothing.

3.11 The Committee are of the opinion that there needs to be a more focused thrust on development, production of indigenous equipment into the Army, with particular reference to the Arjun Main Battle Tank. It is understood that though a limited order for 124 number of these tanks have been placed, the first production models are being further subjected to additional performance trials by the Army. This is primarily due to the unstated concern over quality control at the Ordnance Factory, Avadi at time of issue, which must be ensured by the Ordnance Factory Board to the satisfaction of the user.

The Committee are surprised to note that instead of giving firm order for sufficient number of Arjun Tanks by indigenous production, only a very small order has been placed and the Government has decided to acquire tanks from a foreign country to meet its requirement.

Having incurred an expenditure of approximately Rs. 3,300 crores on the development and productionisation of the MBT Arjun, the Committee are of the firm opinion that the Arjun must be inducted into the Army in large numbers, for which an initial production order for 50 tanks must be placed on Heavy Vehicles Factory, Avadi. This does not absolve DRDO (AHSP for Arjun Tank) and the Ordnance Factory Board of their prime responsibility to ensure that the production model of the tank meets the user requirement in every respect. The procurement plan of the Army must be structured (or re-structured if necessary) to provide for induction of increased numbers of Arjun Tanks by the 11<sup>th</sup>, 12<sup>th</sup> Army Plans, as a replacement for T-72 Tanks.

## **Procurement of Guns for Indian Artillery**

**3.12** Upgradation of the weapon system is a continuous process based on threat perception and technological development. Accordingly, upgradation of the existing stock of artillery and procurement of advanced guns based on modern technology for the modernisation of Indian Artillery are being planned . In written reply to a question on the acquisition of different types of Guns for the Indian Artillery, the Ministry of Defence have furnished the details as given below :

- i. **Wheeled SP Gun** - Request for Proposals (RFP) for procurement of 155 mm/52 Calibre Wheeled Self Propelled (SP) Guns was issued to 11 vendors. Only 5 vendors responded. Of these, 4 were rejected in Technical Evaluation as they did not meet the required parameters. Since only one SP Gun met all the qualitative requirements, it has since been decided to explore if there are any additional vendors currently producing Wheeled SP Guns so that a competitive situation can be developed.
- ii. **Tracked SP Gun** - Tracked SP Gun is a project developed by Defence Research and Development Organization (DRDO). It involves mating a suitable imported 155 mm /52 Calibre turret with indigenously developed BHIM chassis. Process of identification of a suitable turret was completed after global tendering and successful trial evaluation. Commercial negotiations were completed in December, 2003. The case is being processed for approval of the competent authority.
- iii. **Towed Guns** - Global RFP was in December, 2001. Three vendors responded. Trial evaluation of all three guns was carried out in May/July, 2002 and June/July, 2003. Validation firing of all three guns were held in November, 2004. Currently, environmental tests are in progress.

3.13 About the upgradation plan of Guns in Indian Artillery a representative of the Ministry of Defence stated as under:

“We are upgrading 130-mm guns to 155-mm guns, 45 calibre. Ten regiments are being done with imported kits, and the ordnance factories would do for another 14 regiments. We are planning to introduce 155 mm 52 calibre guns, which are presently at trial stage as propelled guns. For self propelled guns, we are determined that Bhim T 6 gun will cater for the requirements of target as propelled guns, and in future, we will continue to look for wheeled self propelled guns. The upgradation of existing 155-mm guns, that is, Bofors Guns is also on the anvil. We are planning to introduce a long-range rocket artillery, the Pinaka System, which is an effort of DRDO. For this system, two major firms, L & T and Tata, have collaborated. For a multi-barrel launcher system, capable of sending rockets up to a depth of 90 kms., negotiations are currently under way. We hope that they will be contracted some time in the current year.”

3.14 In regard to the acquisition programmes of guns the representative further stated:

“We have 155 mm SP Guns for the artillery. We were to acquire in two versions. One was wheeled version and the other was tracked version. Track is like a tank and it was mounted on tracked chassis and you have got a turreted gun on top. Both planned to be the same. One between the wheels and one would be on tracks. What we have now sent up to the CCS or will be sending for the CCS for approval will be high breed gun as was mentioned, used the Arjun chassis, which is a heavy chassis and used the South African gun to be mounted on top of it. That has been on trial and evaluated and it is found to be in order. South African gun mounted on Arjun chassis. This will not impede production of Arjun tanks because they will be manufactured by Bharat Earth Movers Limited, an alternative production line for the chassis. As far as wheeled guns are concerned, we are not yet ready for it. We are going to have or invite vendors and check out with out trials and identify the suitable wheeled gun. So, that is the present situation.

As far as Towed Guns are concerned we had carried out trials earlier. Now we want fresh trials and more competitors to come in. Hopefully, in the next year, we will be going for GSQR evaluation. It will be ready for contracting. There were three vendors in this trial evaluation as a user trial has been carried out. Three rounds of trials have been carried out and now maintenance and evaluation and other aspects are going on. All three will be processed for all stages of the trials. User trial is just one stage of the trials. Then, there are maintenance and environmental trials and DGQA trials”.



**3.15 The Committee note that the Indian Army is facing critical shortage of wheeled Self Propelled (SP) guns of the required standard. The Ministry have informed that though the request for proposals for its procurement was issued to 11 vendors in response to which 5 bids were received and one gun has been finally found to be matching the qualitative requirements. The Committee are, however, surprised to note that no fields trials were held to decide the suitability or otherwise of the bids received which is the normal procedure. The Committee also note that trials are still continuing for the procurement of tracked SP Guns and towed Guns. The delay in the procurement of such crucial weaponry has adversely affected the modernisation of schemes of the defence sources resulting in wastage of a lot of time. The Committee feel that global RFP should have been issued in the first instance to avoid the single vendor situation. The Committee now want immediate decision to be taken to procure the guns at the earliest. The Committee further recommend that R & D efforts for their indigenous production should go simultaneously with the acquisition programme of the Ministry so that Artillery is not made to face the shortage of critical components of the weapons system.**

### **Phasing out of Cheetah /Chetak Helicopters**

3.16 Presently, Indian Army depends on Cheetah and Chetak helicopters for surveillance system in the high altitude regions. The design of these helicopters is 40 to 45 years old due to which the emerging requirements of the Army in the high altitude terrains are inadequately addressed. In reply to a question on the replacement of ageing Cheetah/Chetak Helicopters the Ministry have stated in a written reply that the Army is looking for alternative options for replacement of Cheetah with the state-of-the-art technology helicopters available in the global market. Salient technical specifications of the replacement helicopter of Cheetah are as under:-

- a) Integrated Doppler Global Positioning System (GPS) Navigation System;
- b) Auto Pilot in all three axis;
- c) Service ceiling not below 6500 m (desirable 7000m ) pressure altitude;
- d) The helicopter must be cleared for full night and inclement weather operations; and
- e) The helicopter must be capable of being fitted with :-
  - Suitable Sighting System comprising of Forward Looking Infra Red Radar, Laser Range Finder and a designator.
  - Data Link System
  - Flare / Chaff dispenser with suitable defence mechanism.

3.17 The Advanced Light Helicopter (ALH) Dhruv, is in the category of 5.5 Ton class. It can operate in high altitude, but due to its larger class than that of the Cheetah, it requires bigger landing ground/helipads.

3.18 A representative of the Ministry of Defence, during oral evidence stated:

“As far as Army Aviation is concerned, what we are looking at is superior reliability and endurance in high altitude areas; rapid response to emerging situations in combating terrorism; enhancement of capabilities in the utility role and armed helicopter capability. This being the benchmark requirements, the present acquisitions which are planned are that we are planning to upgrade our existing Cheetah / Chetak fleets. Two squadrons we have already inducted and in a couple of months it will be finished and the third squadron the order for which has already been placed. We are also going ahead with weaponising the Dhruv

helicopters for six squadrons of them eventually and we are also planning a replacement of the Cheetah and Chetak fleet for which the trials are presently on. Utility Helicopters in the 10-12 class to enable the Army to move at core and divisional level, a certain body of men to quickly and rapidly react to report about infiltration being undertaken by the terrorists as also for various other operations in conventional wars and helicopters mounted surveillance systems”.

**3.19 The Committee note that the Army is looking for alternative options for replacement of Cheetah Helicopters with state-of-the-art helicopters available in the global market. The Committee, keeping in view the requirement of superior reliability and endurance in high altitude areas, rapid response to emerging situations in combating terrorism, desire that the Ministry should also examine the feasibility to upgrade existing Cheetah/ Chetak fleets before inducting the new helicopters. The Committee also desire that efforts should be made to modify the configuration of Dhruv Helicopters so as to make it operate at high altitude regions. The Committee also desire that a time bound road map for indigenous manufacturing of helicopters should also be drawn up at the earliest. The Committee hope and trust that sufficient financial allocations are made available to make the new purchases in a time-bound manner.**

### **System of Delivery of justice under Military Law**

3.20 In the Army, justice is administered by the Commanders at various levels. Minor offences can be disposed of summarily by powers vested in them under the provisions of the Army Act. For grave offences, Courts Martial are assembled on the orders of superior commanders. Commanding Officers are empowered to hold summary Courts Martial, decision of these Tribunals are not appealable. It is, therefore, essential to judiciously exercise these powers and adhere to the laid down procedures. With this background, the Institute of Military Law was established at Shimla. On August 26, 1989, the institute was shifted to Kamptee. The Charter of Duties of the School is to cater for a comprehensive system of legal education for Officers of all Arms and Services of the Army and to undertake wide ranging research, development and dissemination work in the field of Military and allied laws.

3.21 The Committee on Defence, in their 20<sup>th</sup> report on “Welfare of Serviceman and ex-Servicemen” have recommend that a special court of appeal in the line countries like France, Germany, Russia, Sweden, and United Kingdom, be constituted for redressal of grievances of the service personnel where aggrieved personnel may appeal against the judgement of Military Court.

3.22 The Ministry of Defence, in their Action Taken reply submitted as under;

“As recommended in 169<sup>th</sup> Report of the Law Commission , a proposal for setting up of an Armed Forces Tribunal for adjudicating service matters and appeals arising out of the verdict of Court martials is under active consideration of the Government. The modalities are being worked out in consultation with Ministry of Law, Ministry of Finance and Department of Personnel and Training”.

**3.23 The Committee, keeping in view the Law Commission recommendations and increase in number of court cases arising out of personnel matters feel that Government should create separate mechanism to resolve them for the settling of Armed Forces court cases. The Committee, therefore, earnestly desire that the modalities for the setting up of new mechanism may be worked out expeditiously to deal with all personnel court cases. The Committee would like to be apprised of the progress made by the Ministry in this regard within 3 months after presentation of this report.**

## **Modernisation of Ordnance Factories**

3.24 The Ordnance Factories form a strategic and dedicated production base for both lethal and non-lethal defence stores. They form an integrated base for the indigenous production of defence hardware and equipment that include highly specialized, complex and large variety of ammunition and explosives, weapons vehicles and equipments, materials and components, armoured vehicles and ordnance equipment. They also produce rockets, grenades, mines, transport vehicles, optical and fire control systems, bridges, parachutes, clothing and personal equipment for the armed forces.

3.25 Products for the Defence Forces have to be safe, reliable, consistent and capable of operating under varying terrains as well as under extreme climatic conditions. Accordingly, the required technologies cover a wide spectrum of engineering, metallurgy, chemical, textile, leather and optical areas, they must ensure high quality and productivity, apart from meeting the important objective of self-reliance. The Ordnance Factories also fulfill certain requirements of the paramilitary and police forces for arms, ammunition, clothing and equipment thereby ensuring that their capacity is optimally utilized, not only by securing work from the defence forces, but also by diversification into non-defence customers and by exports.

3.26 A modernization plan for all Ordnance Factories has been finalized. The plan envisages upgrading technology, augmenting capacities and replacement of old/obsolete plant and machinery with those having state-of-the-art technology. Modernisation and automation of the infrastructure in the Ordnance Factories is being done to meet the Quantitative and qualitative demands of the end products. The product technology, as well as the process requirements and capabilities, are kept in mind during the process of modernisation. The technologies and machines being planned are flexible so as to cater to a wide range of products.

3.27 In a written note the Ministry of Defence have further stated that the Ordnance Factory Board draws up an annual action plan for taking up modernisation works in the factories. For the year 2005-2006, an amount of Rs. 250 crores has been projected in the Budget Estimates for modernisation involving replacement of old & unserviceable plant and machinery. Apart from this a significant amount sanctioned under the Head "New Capital " would also be spent on modernisation works in the existing factories. Some of the major

plant and machinery being procured are Computerized Numerical Control (CNC) cold Swaging Machine, CNC Rifling Machine, Barrel Straightening Press, CNC Alignment Lathe, 3-D Coordinate Measuring Machine, CNC Chamber Boring Machine, Magnaform Machine, Luminosity Testing Machine, High Vacuum Thin Film Coating Machine, Jersey knitting Machine, Auto Side & Heal Lasting Machine, Automation of Assembly Line for Vehicle, Furnaces, X-ray Machine, Nosing Press, Horizontal Machining Centres, Vertical Machining Centres, Turning Centres etc.

3.28 In a written reply to a question on the involvement of Private Enterprises in Defence Production, the Ministry of Defence have stated that a Committee headed by Dr. Vijay L. Kelkar was set up by the Government in April 2004 to, inter alia, examine the current procedures and recommend changes required in order to modify acquisition process on an approach based on a "Product Strategy", modalities of integration of the user, Ministry of Defence and the Indian Industry including both private and public in the acquisition process of equipment required by the Armed Forces. The Report of the Committee is expected shortly.

3.29 A proposal is under consideration of the Government to provide a level playing field between Indian Private companies vis-à-vis foreign suppliers and Defence Public Sector Undertakings/Ordnance Factories for evaluation of bids by off loading various taxes/duties payable by private companies and to provide similar payment terms.

3.30 In accordance with the policy decision taken by the Government in May 2001, the Defence Industry sector is opened upto 100% for Indian Private Sector participation with FDI permissible upto 26% both subject to licensing.

3.31 In regard to increasing production capacity of ordnance factories the representatives of the Ministry, during the evidence held on 2<sup>nd</sup> April, 2005 stated as under:

"About the increase of production capacity which is concurrently being done, by 2006-07, the capacities would have been increased to 40 tanks a year; and by 207-08, it will be 45 tanks. I would like to sort of clarify the Deputy Chief's views that by 2007-08, we would completed the delivery of 124 tanks. A capacity is created in order to have a series production of that. If this goes on, then, every year, one regiment of tank can be given".



- 3.32** The Committee note that a modernisation plan which envisages upgrading technology, augmenting capacities and replacement of old/obsolete plant and machinery with those having state-of-the-art Technology has been prepared. Further Modernisation and automation of the infrastructure in the Ordnance Factories is also being done to meet the quantitative and qualitative demand of the end products.
- 3.33** The Committee further note that in addition to significant amounts sanctioned under the Head “New Capital” an amount of Rs. 250 Crores has been projected by the Ministry in the Budget Estimates 2005-06 for modernisation involving replacement of old and serviceable plant and machinery.
- 3.34** The Committee are given to understand that the basic problems of the Ordnance Factories are how to augment the revenue resources and their capacity to increase the annual rate of production.
- 3.35** From the foregoing, the Committee are of the view that for augmenting revenue resources and production capacities of the Ordnance Factories, there is a need to significantly change the character and nature of working of these Factories by conferring on them status of Public Sector undertakings and running them on commercial lines like the PSUs. This change of the ordnance factories would enable them to raise funds from market, private banks and through Public Issue. Thus Ordnance Factories would gradually become not only financially viable but also strong enough to increase their production capacity, as envisaged. *The Committee, also desire that these Ordnance Factories should take upon themselves the task of peripheral development and social work responsibilities in area of their operation like other PSUs. The Ordnance Factories can involve private sector in product upgradation and value addition wherever feasible.*
- 3.36** The Committee desire that an in-depth study of the modernisation requirements of each ordnance factory, based on its future requirements, should be carried out and a time-bound programme should be chalked out to modernise the ordnance factories.

**3.37 There is also an unstated perception in the Defence Forces regarding unsatisfactory quality control of equipment produced by the Ordnance Factories. They establish their credibility with their main customers, the Armed Forces. The Committee desire that a vigorous quality maintenance drive be carried out in the Ordnance Factories, so that the Armed Forces are not hesitant about the quality of equipment and stores supplied to them from Ordnance Factories. The Committee also desire that Quality Control Organisation may be reviewed and re-structured including transferability of HRD posts. Supplier - Quality Control and user Committee should be established and Quality Control Authority be responsible to the user.**

**3.38 It has been brought out that outdated ammunition is either put on fire or sometime fire takes place of obsolete ammunition. In all parts of the world, there is a complete service which is available for re-cycling of ammunition. The process consists of dismantling the shell and removal of explosives. The entire machinery is self contained and consists of a Mobile Modular Complex with sub-modules with the help of electric generators can be operated by virtue of which the obsolete ammunition is re-cycled by the state of art technology over other methods of destroying or otherwise disposing outdated ammunition. All types of ammunition can be de-militarised from small arms i.e. grenades of bigger Missiles.**

**The Committee are of the opinion that steps should be taken immediately to have the complete services for re-cycling of the obsolete ammunition so as to**

**yield substantial quantities of usable explosives, ferrous/non-ferrous metals.  
Besides, it saves the lives of lot of people.**

## CHAPTER –IV

### NAVY

4.1 The total net allocation (Revenue Expenditure) made to Indian Navy was Rs. 5291.39 crore in the Budget Estimates (BE) 2004-05 which remained almost the same at Rs. 5296.99 crore at the Revised Estimates (RE) stage. The allocation has been increased to Rs. 6026.02 crore in BE 2005-06 thus making an increase of around Rs. 735 crore.

4.2 Similarly, on the Capital Account, the allocation in the Budget Estimates 2004-05 was Rs. 7852.79 crore which went up to Rs 8024.72 crore at RE stage. The allocation in BE 2005 –06 has been substantially increased to Rs. 9222.29 crore.

#### Indigenisation and Modernisation of Indian Navy

4.3 According to the Ministry, the allocation made to Navy including HQ IDS and its percentage share to the total Defence Budget during the last five years is as under:

(Rs. in crores)

Year	Allocation to Navy including Joint Staff	Total Defence Budget	Percentage
2001-02	8368.45	54265.73	15.4
2002-03	8155.32	55661.83	14.7
2003-04	10109.35	60065.80	16.8
2004-05 (RE)	13327.50	77000.00	17.3
2005-06 (BE)	15253.00	83000.00	18.4

4.4 In reply to a question on the programmes and policies for the upgradation and modernization of Indian Navy, the Ministry, in their reply, have submitted that modernization of the Indian Navy and review of the existing Force Level is an ongoing process dictated primarily by threat perceptions, prevailing external strategic security environment, emerging technologies and availability of funds. This is done through a 15 year Perspective Plan and 5-year Capital Acquisition Plans. The Indian Navy has drawn up 15 year Long Term Perspective Plan (LTTP) and a 30 year submarine construction Plan for ensuring balanced overall growth of Navy and to acquire self-reliance in submarine construction.

4.5 A total of 21 ships and 14 aircraft were inducted in the Navy during the 9<sup>th</sup> Five Year Plan period (1997-2002). In the 10<sup>th</sup> Five Year Plan viz. 2002-2007, 12 ships and 24 aircraft including 12 Unmanned Aerial Vehicles (UAVs) have been inducted. Besides, orders have been placed for acquisition of 20 ships and 26 aircraft.

4.6 The Ministry have further stated that a number of Mid-Life Update (MLU) programmes have also been initiated for modernisation of the Navy by replacing obsolete equipment on existing platforms viz. ships, submarines and aircraft. Besides, Anti Missile Defence Systems, acquisition of Unmanned Aerial Vehicles, equipping Navy with air borne early warning and Electronic Warfare capabilities have been other efforts made to modernize the Indian Navy. The induction of vessels of various categories such as aircraft carriers, destroyers, frigates, etc. is made in accordance with prioritized needs of the Navy depending upon threat perception and these vehicles are planned for induction accordingly.

4.7 The Defence Acquisition Council in its meeting held on 25<sup>th</sup> March 2003 directed Navy to ensure that the Force level does not fall below 140 ships. In pursuance of this directive, a 10 year ship building plan was formulated. This plan envisages the induction of 83 vessels of various categories viz. aircraft carriers, warships, submarines, support ships and training ships in a 10 year time span (upto 2012). 19 ships are presently under construction (excluding Admiral Gorshkov ) and cases for acquisition of 24 new ships, 6 submarines and 11 aircraft are being processed.

4.8 Proposals for the acquisition of Capital assets generally flow from the Defence Procurement planning process. This planning process cover long term, medium term and short term acquisition plans as under:-

- a) 15 year Long Term Perspective Plan (LTPP)
- b) 5 year Service Capital Acquisition Plan ( SCAP)
- c) Annual Acquisition Plan (AAP)

4.9 The Navy has accordingly made 15 year Long Term Perspective Plan, 10 year Ship building Plan, 5 year service capital Acquisition Plan and Annual Acquisition Plans. As the ships construction activity is highly capital intensive, involving long gestation period, they usually cover two 5 year plan periods. As mentioned earlier, the 10 year Ship building Plan envisages the induction of 83 vessels of various categories. A total of 21 ships and 14 aircraft have since been inducted in the 9<sup>th</sup> Five Year Plan period (1997-2002). In the 10<sup>th</sup> Plan Period (2002-2007), as on date, 12 ships and 24 aircraft have been inducted.

Presently, 20 ships and 26 aircraft have been ordered and cases for acquisition of 24 new ships, 6 submarines and 11 aircraft are being processed.

4.10 In regard to adequacy of funds allocated and progress of Navy expedited, the Ministry have stated that the current budgetary allocations are adequate to provide for obligatory charges, essential maintenance requirements, committed liabilities and priority new schemes. In order to ensure that naval preparedness is not adversely affected, the progress of the Navy's expenditure and status of ongoing / new schemes would be constantly reviewed during the fiscal year and Plan period. If need be, Ministry of Finance would be approached for additional allocation of funds.

4.11 The Navy presently has 12 ocean-going Mine Counter Measure Vessels (MCMVs). However, with the planned de-induction of 8 vessels from 2006-2008, the MCMV force levels would drop to 4 vessels. The service life of these 4 vessels is being extended through Mid-Life Update (MLU).

4.12 Induction of 8 MCMVs has been included in the 15 – year shipbuilding Plan. Based on this plan, a ten year Shipbuilding Plan has been prepared by the Navy keeping in view the directive of Defence Acquisition Council that the total number of ships does not fall below 140 in number. The requirement of 8 MCMVs has been included in this plan. Ministry of Defence is processing the case for acquisition of 8 MCMVs for Navy.

4.13 Keeping in view the delivery period of 36 months for the first vessel after placement of order; the induction of eight MCMV is likely to be made over a period of 7 years.

4.14 During the evidence, representatives of the Ministry of Defence on perspective plan of the Navy submitted as under:

“In the presentation, what I said was that in our perspective plan, we have put it at 195 ships. But the Defence Acquisition Council gave a directive that was a part of the Fifteen-Year ship building Plan and we should make a Ten Year Plan. The DAC also directed us that we should ensure that the force levels do not fall below 140. Figure that we are looking at is 140. But based on the current decommissioning schedule it would drop to 123. It will pick up and come to 132 by the end of the Eleventh Plan.

In regard to the facilities for submarine construction a representative of the Ministry of Defence stated that submarine construction is a very specialised kind of a task, and none of our yards will be able to take it on at this stage. The representative admitted the shortage of manpower is a critical area affecting the Navy. He further informed that the Government did not allow the Navy to recruit more manpower”.

4.15 In regard to the problem areas in the Indian Navy a representative of the Ministry stated as under:

“There are certain shortfalls in certain critical areas, which we had highlighted in our earlier presentations. We are looking for enhancement in the surveillance capabilities, mainly, in terms of long-range aircraft that would keep the entire Indian Ocean, our area of operation, under surveillance.

The other area where shortfall is there has been in the acquisition of Submarines Multi Role Helicopters and Mine Counter Measure Vessels. A lot of questions were also asked throughout the other day on this issue. Otherwise, with the approval of our plans in time we should be able to build the requisite force levels to meet the kind of threats that we envisage in our area”.

- 4.16 The Committee note that for modernisation of the Indian Navy and review of the existing force level a total of 12 ships and 24 aircraft have so far been inducted in the 10<sup>th</sup> Plan period (2002-2007) till now, as against the directive of Defence Acquisition Council that the total number of ships does not fall below 140 in number. The Committee further note that in pursuance of this directive 10 year (up to 2012) ship building plan was envisaged for induction of 83 vessels of various categories viz. aircraft carriers, warships, submarines, support ships and training ships. 19 ships are presently under construction (excluding Admiral Gorshkov) and cases for acquisition of 24 new ships and 6 submarines and 11 aircraft are being processed.
- 4.17 As regards the Mine Counter Measure Vessels (MCMVs), the Committee are constrained to note that out of the 12 ocean going MCMVs available with the Navy, with the planned de-induction of 8 vessels from 2006-08 the MCMVs force level would drop to 4 vessels. The Committee are given to understand that the requirement of 8 MCMVs has been included in this plan and the Ministry of Defence is processing the case for acquisitions of 8 MCMVs for Navy. The Committee, therefore, hold the view that after de-induction of 8 vessels from 2006-08, it has become imperative that the Government should expeditiously complete the processing of this case for acquisition of 8 MCMVs for the Navy as per schedule.
- 4.18 The Committee note that there have been shortfalls in certain critical areas like surveillance, mainly in terms of long range aircraft, and acquisition of submarines. The Committee desire that immediate steps should be taken to meet the above requirements of the Navy in a time-bound manner. The Committee also desire that sufficient funds should be provided to the Navy to meet the requirements.
- 4.19 The Committee note that the technical expertise gained by the country in the construction of submarine (Mazagon Dock Limited) would be lost, if the orders are not placed for above mentioned dockyard, as the last submarine constructed by Mazagon Dock was in 1994. This has affected even the private sector which participated in construction of submarine in the past. The Committee note that no action has been taken by the Government on their



earlier recommendation(s). The Committee desire that immediate decision should be taken on all the indigenous production of submarine and other ships and firm orders should be placed on the Mazagon Dock limited without any loss of time.

- 4.20 In view of the foregoing, the Committee, in the interest of the security of the nation, strongly desire that the naval preparedness should not be affected at any cost. The progress of the Navy's expenditure and status of ongoing/new schemes should be constantly reviewed for taking corrective measures during the plan period. The Navy has also highlighted the shortage of manpower in critical areas. This a matter of crucial importance. The Committee desire that the Government should immediately review its policy of recruitment in the context of the Navy and allow it to recruit the necessary manpower.
- 4.21 The Committee also earnestly desire that the Ministry should take effective steps in order to strictly adhere to the directives of the Defence Acquisitions Council that total number of ships does not fall below 140 in number.

### **Construction of Air Defence Ship**

4.22 In keeping with the policy of maintenance of two operational aircraft carriers at any given time, Government approved the acquisition of an Air Defence Ship (ADS) through indigenous construction at Cochin Shipyard Ltd. (CSL), Kochi, in 1999. Keeping in view the strategic importance of the ADS, approval was accorded for a high capacity ship of 37500 tonnes in January 2003 at a revised cost of Rs. 2880 crore. The construction of the aircraft carrier is scheduled to be completed by 2011-2012.

4.23 'Concept Design' defining the ship's overall dimensions, studies, general arrangement drawings etc, have been completed. Generation of detailed designed document/drawings is in hand.

4.24 Negotiations for procurement of 5,300 tonnes of D40S Steel (Plates and sections) from indigenous source were held and a contract has been concluded for the first batch of steel with SAIL, Kolkata. The first lot of the steel has been received at Cochin Shipyard Limited (CSL), Kochi. The production is scheduled to commence with cutting of steel on 11 April 2005. Major contracts for Propulsion System Integration (PSI) and Detailed Engineering and Documentation Contract (DEDC) have also been concluded. Aviation Facilities Complex Contract is in the final stage of negotiation and is expected to be completed shortly.

4.25 As per the information furnished in Defence Services Estimates 2005-06 in regard to the allocation of funds for the construction of Air Defence Ship Rs. 180 crore was allocated in Budget Estimates (BE) 2003-04 which was reduced to Rs. 0.84 crore at Revised Estimates (RE) stage. During BE 2004-05 Rs. 200 crore was allocated but the RE was only Rs. 0.47 crore. During the Budget Estimates 2005-06 a total of Rs. 245 crore has been allocated to go ahead with the project of Air Defence Ship.

4.26 In regard to the present status of the acquisition of aircraft carrier Admiral Gorshkov, the Ministry stated that contracts and supplementary agreements comprising of repair and re-equipping, logistic supports, shore infrastructure, training of crew, repair and technical documents, etc. were signed with Russia on 20.01.2004 for acquisition of Admiral Gorshkov. The repair and re-equipping of the ship commenced in April 2004 and is scheduled to be completed by August 2008.

4.27 During the oral evidence the Ministry informed:

“The point about the need of three aircraft carriers is well taken. The Navy has recognized this for a long time now. It is also catered for in our long-term plan. Hon. Members would be aware that we are building the aircraft carrier at the Cochin Shipyard. Of course, there have been some delays. We are now at the stage where we will be cutting the steel. That means, the actual construction starting point - after all the design etc. has been completed – will take place next month. We hope that this would be a continuous line thereafter.

This carrier gets delivered in the early part of the next decade, that is, in 2011-2012. By that time, we would be ready to place an order for another aircraft carrier. The Russian-made aircraft Ex-Admiral Gorshkov will definitely continue for about 25 odd years. The Indian Navy expects to get delivery in the year 2008. This aircraft carrier will last for about 25 years. The programme of modernisation is going on at the correct pace. We are happy with it. The aircraft for that are also on order, and will be ready before the ship comes out.

The INS Viraat will definitely be paid off before the end of this ship comes out. The INS Virat will definitely be paid out before the end of this decade, that is, in 2009-2010. After that, we will only be left with Ex-Gorshkov. Till the time we get the Air Defence Ship (ADS). We hope that by the end of the next decade, we will actually have three carriers for utilization, namely, one on the western seaboard, one on the eastern seaboard, and the third one would be under re-fit stage at most times”.

**4.28** Keeping in view the vast maritime expanse of the country, the Committee note that the Indian Navy urgently requires three aircraft carriers – one for the eastern coast, second for the western coast and third one required to address the maintenance/repair needs of the other two carriers. The Committee note that during the Budget Estimates 2004-05, Rs. 200 crore was allocated to the project of Air Defence Ship but at the RE stage the amount was reduced to Rs. 0.47 crore in view of the difficulties associated with acquisition of materials for its construction. During the Budget Estimates 2005-06 Rs. 245 crore has been allocated to the project. The Committee take a serious note on non utilisation of allocated funds by the Navy, which has adversely affected construction of the Aircraft Carrier. The Committee also note that the aircraft carrier Admiral Gorshkov would be handed over to the Navy by the end of 2008. By that time Navy would be depending on the ageing INS Virat which is expected to be decommissioned by 2009-10. Thus after 2010 Indian Navy will have to rely on the services of Admiral Gorshkov only. As the delivery of indigenous Air Defence Ship would not take place before 2012, the Committee feel that there is an urgent need to address the coastal surveillance of the country during this interregnum. The Committee, therefore, strongly recommend that necessary infrastructure should be immediately created so that the construction of one more aircraft carrier of the Gorshkov standard may be undertaken simultaneously on the line of ongoing project of the construction of Air Defence Ship, thereby making the Indian Navy self-reliant in terms of the number of aircraft carriers. The Committee hope that sufficient funds are allocated during the current financial year for the construction of the aircraft carrier would be fully and properly utilised and efforts would be initiated in the direction of undertaking one more similar project. The Committee also desire that Government should ensure that adequate funds are made available for the purpose.

## **Project Seabird**

4.29 Project Seabird is a project for construction of a new naval base at Karwar in Karnataka. The objective of the new naval base is to decongest the existing naval bases at Mumbai and Vishakhapatnam. In September, 2003 based upon the Cabinet approval, the cost of Project Seabird Phase 1 was revised from Rs. 1294.41 crore to Rs. 2459.20 crore. Preliminary steps for 'Project Seabird' were initiated with the commencement of activity in 1986 for land acquisition. The first contract of marine works was concluded in August 1999. The signing of the first contract for onshore infrastructure took place in October 2001. It is expected that by May 2005, all activities pertaining to marine works will be completed. The major onshore infrastructure works are also likely to be completed by end 2005.

4.30 To avoid slippages in the project progress, a project implementation and monitoring team under Deputy Director General (Project Implementation ) monitors the work at site, on a daily basis. The Director General Seabird Project (Read Admiral Officer ) reviews the progress of works at site every month and plans for all future project tender packages, based up the Project implementation milestones. At the Ministry level, a project Monitoring Board (PMB) chaired by the Defence Secretary, has been holding half yearly reviews of the project progress.

4.31 Naval Hqrs had initially projected financial expenditure target for the Financial Year 2004-05 based upon an expectation that major ongoing and future project packages would be largely completed in 2004-05. The project progress was affected due to issues relating to certain restrictions on site work imposed by the forest department of Govt. of Karnataka, and reduced pace of work due to intervening monsoon conditions, consultation required with the project consultants for finalising additional work packages and technical difficulties in concluding contracts etc.

4.32 The budget estimates of 'Project Seabird' of Rs. 469 crore for the year 2005-06 are less than the Budget Estimates of Rs. 722 crore of the year 2004-2005. This is because peak project activity has taken place in the year 2004-05 and comparatively less project activity will take place in the year 2005-06. (Most of the project activity is expected to be completed by the end of financial year 2005-06).

4.33 The Ministry have further stated that the development of Project Seabird is progressing as per expected schedule and the created infrastructure/facilities are being progressively commissioned. Phase I of the project is expected to be completed by 2005 and ships are planned to be based at Karwar on completion of Phase I.

4.34 The major facilities, which have been completed are as follows:

- a) Construction of all three breakwaters, approximately 6.5 kms in length.
- b) Reclamation of 50 hectares land
- c) Dredging of inner, central and outer harbour basins, approach channel and anchorage.
- d) Construction of 415 metre long Pier/Jetty
- e) Installation of 6500 Tons Ship Lift (trials scheduled end April 2005)
- f) Construction of priority housing.
- g) Construction of married accommodation for officers and sailors
- h) Primary and secondary schools
- i) Shopping Complex
- j) In-living bachelor's accommodation
- k) Sub-station/Power distribution station complexes
- l) Ration Issue Stand.

4.35 The major facilities which are likely to be completed in a phased manner by end 2005 are :

- a) Depot/Administration Building
- b) Naval Hospital
- c) Naval Store Depot/ Logistics Complex
- d) Weapon Equipment Depot
- e) Officers Mess.
- f) Transport Pool / Workshop
- g) Base Victualling Yard
- h) Naval Ship Repair Yard
- i) Water, Electricity & Sewage services.

4.36 Out of the overall allocation of Rs. 2459.20 Crore for the project, Rs. 1832.32 Crore are likely to be spent by end of Financial Year 2004-05.

4.37 During oral evidence regarding deficiency and progress of the project, the representatives of the Ministry informed:

“It was for the deficiency that we found at Mumbai, the amount of growth that was taking place there and the finite land that was available, that we had to go in for a green field project out of nothing existing at Karwar. We developed that port. This is now at the stage of being commissioned within a couple of months from now. This is ‘phase one’ of the project. It is a very large project. Regarding infrastructure, as I said, this time we have looked at our requirements over the next 15 or 20 years. Therefore, it did become a very expensive project. We have had to progress it in phases. Now, we are in the stage of finishing ‘phase one’ and we will be basing about one dozen ships over there in a few months time”.

As regard the 10% cut in technical or civilian employees in Navy, the representation of the Ministry during the evidence stated as under:

“ As far as the first part is concerned, 10 percent cut applies across the board to all the categories of civilian manpower. We are not allowed to fill up the post even if we have vacancies available to us. As and when the post falls vacant, we are not allowed to fill them up. This is the Government’s policy and therefore, we have to cut down on the manpower across the board. The point at this stage which would help considerably is that, at least, all the new acquisitions which we make, particularly when it comes to major acquisitions or a big project like the Karwar Naval Base, then we cannot operationalise those assets unless we have the requisite manpower available to us”.

- 4.38 **The Committee note that the cost of the Project Seabird was revised from Rs. 1294.41 crore to Rs. 2459.20 crore in September 2003 and the created infrastructure is being progressively commissioned. The Committee further note that major facilities like Depot/ Administrative Building, Naval Hospital, Naval Store, Water, Electricity etc. are likely to be completed by 2005 in a phased manner.**
- 4.39 **The Committee, keeping in view the cost and time overruns of Phase-I project, recommend that Ministry should take all steps to ensure that Phase - I of the project, must be completed as per revised schedule. The Committee also desire that revised funds allocated for the purpose should be utilised prudently and effectively as envisaged by the Ministry for completion of Phase-I project. The Committee also desire that second phase of the Seabird should be taken up without loss of time on completion of phase-I. Considering the fact that the cost of completion of phase-I had been revised from Rs. 1294.41 crore to Rs. 2459.20 crore, the committee desire that all out efforts should be made by the Ministry to complete the second phase of the project in a time-bound manner without any cost and time overrun.**
- 4.40 **The Committee also note with concern that due to ten percent cut imposed by the Ministry of Finance on recruitment of civilian manpower of Navy, it would be difficult to fully operationalise the Seabird project. The Committee taking note of the fact that 52% of the manpower in Navy is from civil but technical, the Ministry of Finance should not impose any restriction of their recruitment. The Committee would like to be apprised of the progress made in this regard.**



## **CHAPTER-V**

### **AIR FORCE**

5.1 The total allocation (Revenue Expenditure) made to Air Force in Budget Estimates (BE) was Rs. 8467.17 crore which was slightly increased to Rs. 8506.32 crore in the Revised Estimates (RE). The allocation in the BE 2005-06 has been put at Rs. 9003.42 crore.

5.2 Likewise, on the Capital Account the allocation in the BE 2004-05 was Rs. 14801.63 crore which increased to Rs. 15269.10 crore at the RE stage. The allocation on the Capital Account in the BE 2005-06 is Rs. 12803.15 crore.

#### **Inventory Management and Force Multipliers**

5.3 The Indian Air Force (IAF) is a modern, technology intensive force with commitments to excellence and professionalism. Keeping pace with the demands of contemporary advancements, the IAF continues to modernise in a phased manner and in course of time has achieved significant milestones in the field of self-reliance in the operation and maintenance of its fleet.

5.4 During a presentation on the budgetary allocation for Air Force, the Committee was apprised that the present force level of Air Force was 37 squadrons whereas the projected strength was 39.5 squadrons though the requirement was of 40 squadrons. By the end of the 10<sup>th</sup> Plan the projection was made to be of 29 squadrons which was to be reduced to 26 by the end of the 12<sup>th</sup> Plan. Regarding requirement of squadrons in Air Force a non-official expert, during the oral evidence held on 7 April 2005, submitted as under :

“If you see what Budgetary allocations are made and the requirement for growth of military forces to meet this requirement, you would find that the gap is huge. I can speak specifically for the Air Force and say that the Tata Committee and the Subramanian Committee have said that for this type of a threat there is a requirement for 65 squadron. When I joined the Air Force it came down to 65. At present, it is rated at 39.5 and in actual fact though the Air Force is giving a figure of 37, I believe it much lower than that. This is the fundamental issue. If you let redundancy creep into any technical organisation like this, then a time will come when as much as you put in, it will be hard to recover. Why is India struggling today? Out of the 26 aircraft, only six are new and the rest are old. They just did not buy anything. These six were bought under great pressure.”

5.5 In response to the clarifications sought by the Committee during oral evidence of the representatives of Ministry of Defence regarding force level and Lines of Production in Hindustan Aeronautics Limited (HAL) the Committee was apprised as under:

“What we are looking at are primarily the medium weight aircraft ranging from 15 to 20 tonnes. We have three classifications for the aircraft; light, medium and heavy. Su-30 is 30 tonnes and above and so that is in the heavy class. The quality of aircraft, which we are looking at, primarily caters to our strike force depletion, which is Mig – 23 and the Mig – 27, which will be phased out in the Tenth and the Eleventh Plans. So, we are looking at this 126 from that angle. As far as the LCA is concerned, that will replace mainly the Mig- 21 which are going out. That is why it is in the light category.

You have asked a number of questions. I will go in chronological order. The first is regarding inductions. The depletions were primarily in case you do not factor in the inductions, which we have shown you in the next slide. Therefore, simultaneously whilst the depletions are taking place because of the ageing factor – he has talked of the Calendar life and the technical life we are also inducting aircraft. For example, in the last four days we have also inducted two aircraft of SU-30 class from the HAL. This induction will carry on because we have got a phased programme for inducting in 140 aircraft. We are just in the process, probably in the next couple of days, to pick up nine jaguar trainers from HAL. These are indigenously manufactured. Thereafter we will pick up another 20 Jaguar fighter aircraft from HAL. So, as far as these inductions are coming in, they are catering to all these depletions that he indicated.

There are certain factors as far as HAL is concerned in terms of RADARS which is also being indigenously developed and we have been assured that by June a very clear cut positions would be given to us as to how the RADARS development is progressing”.

5.6 He further stated that :

“As far as bringing in the LCA into our planning process is concerned, I assure you that this homework has already been done. We are very clear about the rate at which the LCA is going to be inducted into the Air Force. However, the milestones that are there need to be crossed, whether it is with regard to engine or the radar or the weaponisation of the aircraft. They are the teeth to the aircraft. We are watching that very closely. As regards induction, we have even decided with the HAL as to what stage the aircraft will get ramped up from 8 to 14 and from 14 to 20, so that the per year production can increase substantively”.

5.7 The Defence Secretary, in this regard, also added as under:

“The Air Force is pretty confident that it will go, because it is shaping up well. However, all countries have such experiences. I would not say that no country adopts R & D programme and every programme succeeds. R & D, by its very nature, presumes that you might succeed. So, this is the first thing. The other thing is about induction as a front line aircraft. Every Air Force of any substance has aircraft of various types, ranges and weight class. As the name suggests, it is a Light Combat Aircraft (LCA). Currently, what we are talking about is F-16 and other things like Multi Mission Combat Aircraft, a medium aircraft. Then, there are slightly heavier class of aircraft like SU-30, or the American F-18. These are in the heavier category. Now, every Air Force likes to have a combination of heavy, medium and light aircraft. The LCA will fit very well into the front line requirement of a Light Combat Aircraft”.

5.8 Regarding use of infrastructure available with the Air Force a non-official expert submitted as under :

“Today when you buy an aircraft, you spend a huge amount as investment on infrastructure. Take the case of Mirage. When the Mirage base was established, I established the base, we had planned for problem. So, they bought only 40. I built up for 150. Today we have now a slot where you can fit in 150 aircraft plus. When we bought SU-30, a completely new infrastructure was built in Pune and places like that. It is very complicated and expensive infrastructure. Now, if you go for the F-16s, you have to set up a totally different infrastructure.”

5.9 In regard to the status of Force Multipliers in Indian Air Force a representative of the Ministry of Defence substantiated as under:

“As far as the force multiplier is concerned, it is a precision guided ammunition for our fighter aircraft. Last is the data link. Now, as far as the data link is concerned, we will be undertaking a pilot project to ensure that, this being the centre to our next centric warfare capability, the data link is very important for our future capability of the Air Force. The pilot project would be initiated first, after which we would undertake this in a phased manner. It is planned to be finished in one year. Then, we would go ahead.

Coming to the radars, the number of radars in the medium level surveillance capability category is 32, and the number of radars required is 44. The number of low level surveillance radars required is 107, and the available is 38.

The Government Committee on Air Space Management had recommended that 25 additional radars be acquired. Earlier, the requirement was 75, and it has gone up with the reserves, to 107. It is

Aerostat. Out of the total requirement of 13, we have inducted two, and the balance would be inducted after we find that the aerostats are successful.

This is just an induction of what is the coverage at medium and high level over the entire country with our medium power radars. You will notice that in the central and peninsula India, there is a gap which exists. At a height of 10,000 feet, with the same radars that are available, there are significant gaps available all over the country.

This is the coverage on the border by the low level transportable radars this indicates that we do not have any defence in depth for our limited area defence list. As you will see, it is just sufficient to cover the border area only. But there is no scope for redundancy and there is no defence in depth for our in-depth vital areas on vital points. This is the point, which the committee may like to kindly consider.

The induction that are planned are the medium power radars. A total of 15 + 8 medium power radars are planned. These are low level transportable radars. A total of 19 is pending presently with the Ministry of Defence. It is Low Level Light weight radars. We have planned to induct 39. We have inducted three. We are carrying out trials and once, these are proved successful, we can induct the rest. CAR is the Central Acquisition Radars. These are planned to be met indigenously by BEL. There is a requirement of seven radars. This is Indra-II. Six are being manufactured indigenously. It is upgraded and a high power radar. It is THT-55, which is being undertaken”.

5.10 The Defence Secretary in connection with the surveillance system of the air space also added as given below:

“It would be wrong on my part to say that I am totally satisfied with the level of surveillance either of the airspace of the country or surveillance, as protective surveillance for individual installations or individual platforms like a ship, which you had mentioned, or for that matter, the major cities or the industrial establishments of the country. It is because; all of them have to be protected against undesirable activities. Generally, radar is required for these cases, for detecting some intrusion from the Air. So, there has to be a network of radar of various types, which are covering the entire spectrum of various heights at the borders as also within the country”.

- 5.11** The Committee note with serious concern that out of 39.5 projected squadrons, Air Force has now only 37 squadrons, which shows shortage of 2.5 or three squadrons. The Committee further note that by end of the Tenth Plan this shortage would increase. Further, by the end of 12<sup>th</sup> Plan the shortage will be almost 1/3<sup>rd</sup> of the projected strength.
- 5.12** The Committee, therefore, in the interest of the security of the nation, would like to recommend strongly that Ministry should make all efforts to keep the required number of squadrons by simplifying their acquisition procedure and minimising the delay in acquisition of new aircraft. The Committee also desire that our indigenous production capacities should also be suitably enhanced. The Committee are of the view that there is also an urgent need to plan for acquisition of fifth generation fighter aircraft to take care of our defence needs in future.
- 5.13** The Committee note that the Air Force has 26 different types of aircraft which require different types of infrastructure to operate. The Committee feel that there is need to check the large inventory and acquire as far as possible similar type of aircraft as have been already in service with the Air Force. The Committee desire that the facilities created by HAL should be put for optimum use before any such further investment is made in such projects. For this, the Committee desire that firm order for the manufacture for required number of the Light Combat Aircraft (LCA) should be given to HAL by the Air Force. This will also ensure timely replacement of ageing MIG-21 fleet. The Committee note with concern that the required number of different types of Radars specially low level surveillance Radars to meet the operational requirements of the Air Force are not available with them. The Ministry should ensure that these are available in the shortest possible time to improve the low level of surveillance capability to cover the whole geographical areas of the country. The Ministry should explore all ways and means to procure improved system in required number. The Committee would like to be kept informed about the concrete steps taken by the Ministry in this regard.

## **Development of Indigenous Jet Trainer**

5.14 Government approval was accorded in July 1999 for design and development of Intermediate Jet Trainer (HJT-36) by HAL as a replacement of the ageing Kiran aircraft fleet at a development cost of Rs. 180 crore at 1997 price level. The time schedule for completion of the project for obtaining Military certification was fixed at 60 months.

5.15 Accordingly, HAL has designed the Intermediate Jet Trainer (HJT-36) and has produced prototypes. The first flight of the Intermediate Jet Trainer took place in March 2003. Subsequently, the second prototype flew in March 2004. The two prototypes have completed more than 150 flights towards its flight development plan. The results from the flight tests have showed that the parameters achieved are very close to the estimated performance.

5.16 The following tasks are under progress and are planned to be completed for Final Operational Clearance of aircraft.

- a) Integration of the higher thrust engine with the airframe for flight-testing and certification of the engine for production phase of the aircraft. Presently, French Larzac 04H20 engine is fitted on the prototypes with 1400 kg thrust. To improve the performance of the aircraft, a higher thrust engine with 1700 kg is considered necessary. The AL55I engine has been selected by HAL through international competition. This engine is currently being developed by Lylka-Saturn Design Bureau in Russia.
- b) Weight reduction programme for improvement of performance.
- c) Completion of development, evaluation and qualification of all newly designed systems, weapon integration.

5.17 A total of 500 flights are to be performed for the final operational clearance of this trainer.

5.18 In July 2004, HAL has submitted to Air Headquarters a proposal for supply of an initial batch of 12 HJT-36 aircraft to IAF on limited series production basis during 2007-08 to 2009-10. This is being processed.

5.19 AL-55I engine for the IJT aircraft was selected based on a two bid limited tendering system, followed by technical and commercial evaluation by a Committee constituted by HAL. Discussions were held with the Russian team during 28<sup>th</sup> and 29<sup>th</sup> December 2004 on the draft Inter Government Agreement (IGA) for licence manufacture and draft General Contract for design and development of the engine. The draft IGA and the draft contracts have been co-ordinated with the Russian side and all the issues outstanding have been resolved. These would be finalized after necessary approvals are obtained.

5.20 Intermediate Jet Trainer (IJT) will be used to meet the requirement of second stage training of IAF pilots. IJT will cover the following training needs:

- General Flying
- Navigation formation flying
- Instrument and cloud flying
- Tactical flying
- Night flying
- Basic air to ground and air to air weaponry training.

5.21 The Advanced Jet Trainer covers the third stage of training of IAF pilots. The third stage includes advanced weapons training and combat maneuvering training of the pilots intended to have a smooth transition for the pilots for flying combat aircraft like SU-30, Mirage-2000, MIG and the Jaguars.

5.22 A proposal for development of indigenous twin engined Advanced Jet Trainer is being discussed with the Air Force to meet possible requirements beyond the Hawk AJT.

- 5.23** The Committee note that the Government approved the indigenous design and development of Intermediate Jet Trainer (HJT –36) by HAL way back in 1999 as a replacement of ageing Kiran aircraft. Even after the passage of six years the final operational clearance of the trainer has not yet taken place. Though the prototypes of the trainer have so far completed 150 flights towards its development plan, the results have not been found to be satisfactory. The Committee note with concern that the flight testing of the prototypes is being undertaken with French Larzac engine and Russian AL-55 I engine the indigenous version of which has still not been developed. The Committee also note that once successfully developed, the trainer may be configured to meet the requirements of second stage training of Indian Air Force pilots.
- 5.24** The Committee, therefore, recommend the Ministry to intensify their R&D efforts to develop the indigenous engines for HJT-36. Keeping in view the prospects of developing the HJT-36 into a futuristic Advanced Jet Trainer, the Committee also recommend that efforts need to be expedited to develop its configuration on the line of AJT Hawk to be procured from U.K so as to address the need of third stage training of Indian Air Force.
- 5.25** In this connection, the Committee also note that the existing front line fighter fleet of the Indian Air Force would have reached the end of their service life by 2020-2025, and be due for replacement by that time. The Committee were also given to understand that some discussions were under way with a foreign country for design of new fifth generation fighter aircraft. The Committee strongly feel that coordination efforts between the DRDO, the Air Force, Hindustan Aeronautics Limited and other consultants must be initiated at the earliest, and development of an indigenous Multi-Role Combat Aircraft' be formally commenced; so that it could replace the current fleet in the time-frame 2020-2025 so that there should be no gap in Air Force resources.



**CHAPTER-VI**  
**DRDO**

6.1 The total allocation (Revenue Expenditure) made to Research and Development Organisation in Budget Estimates (BE) 2004-05 was Rs. 2342.94 crore which increased to Rs. 2409.85 crore in Revised Estimates (RE). The allocation in BE 2005-06 has been put at Rs. 2814.26 crore recording an increased of approximately Rs. 400 crore.

6.2 On the Capital Account the allocation in BE 2004-05 was Rs. 1657.28 crore which was substantially reduced to Rs. 1335.41 crore at the RE stage. The allocation in BE 2005-06 has shot up to Rs. 2540.36 crore.

**Upgradation Plan at DRDO**

6.3 According to the Ministry the details of allocations made to DRDO based on modified appropriation, actual expenditure and the unspent allocations, during the last ten years are as follows:

<u>Year (s)</u>	<u>Allocations</u>	<u>Expenditure</u>	<u>Unspent Allocations</u> <u>(2) – (3)</u>
1	2	3	4
1994-95	1245	1240	5
1995-96	1376	1382	-6
1996-97	1455	1436	19
1997-98	1979	1951	28
1998-99	2300	2292	8
1999-00	2827	2824	3
2000-01	3359	3341	18
2001-02	3173	3119	54
2002-03	3079	3006	73
2003-04	3458	3441	17
2004-05	3747	-----	-----

6.4 Allocations available to DRDO under the heads Stores, Grants-in-Aid and Capital are utilized for progressing various Projects, Programmes, Special Schemes and other R & D activities. The percentage utilization of total available allocations for these activities has been ranging between 64.47% to 72.85 % for R & D activities during the above period. During the last 6 years the percentage utilization on project activities has been around 70 %.

6.5 The Ministry has informed that the Government is taking following major steps at planning level to avoid delays:

- Adopting technology evaluation and assessment prior to taking up fresh projects.
- Involving Users in project Peer reviews, project progress reviews to cut short delays and to know their views in advance including General Staff Qualitative Requirements and also to keep continuous visibility of the projects.
- To de-link user trials and evaluation from the development phase activities. The trial and evaluation procedure is being jointly worked out in some projects.
- To lay adequate focus on 'Concurrent Engineering' approach wherein a Production Agency (Private or Defence PSUs/Ordnance Factories) is identified well in advance so as to cut short production delays.
- Involving Users with financial commitments for development and production for staff projects.
- To bring in synergy between developing agencies/labs, User Services and Production Agencies, DRDO is arranging 'Cluster Meetings' among DRDO labs, User Services and Defence PSUs /Ordnance Factories. Interaction meetings with private industries through their apex bodies like FICCI, CII and ASSOCHAM are also organized for their participation.

6.6 As regard the long term collaboration with industries the Ministry has informed that DRDO is involving industries as development partners wherever industries are having facilities for R & D work and showing interests in long-term collaboration with DRDO. Such collaborations are quite fruitful in smooth and real time transfer of technology and also to avoid delays in identifying production partners. We are identifying these industries by holding interaction meetings zone-wise through their respective apex bodies like CII, FICCI and ASSOCHAM, etc.

6.7 DRDO maintains close liaison with industries. Problems faced by the industries in processing and production of various products are solved by giving proper advice/guidance to them. Analytical and test facilities available at the DRDO laboratories located all over the country are also being extended to industries to expand and upgrade the industrial base in the country.

6.8 In its resolve to provide access for making the defence technologies available to common man in addition to their usage by defence services, during the year 2004-2005, DRDO ventured in transferring a large number of its state-of-the-art technologies namely, in the fields of NBC-canisters, gloves, overboots, auto-injectors, filters; Life Sciences – herbal products namely, anti-leucoderma, anti-eczema, anti-toothache, herbal beverage from seabuckthorn, herbal tea from herbs; arsenic removal filters, mosquito repellent spray and cream, 2 deoxy-D-Glucose 2DG, field stretchers, critical care ventilator, retort pouch process, nutri bar, preserved and flavoured chapattis. These dual use technologies have been transferred to over 40 entities in the private sector for production and commercialization.

6.9 DRDO is collaborating with more than 250 industries in its all major programmes and many small value projects. DRDO is spending about 30 to 35 % of its allocated budget on industries towards R & D activities.

6.10 A representative of the Ministry of Defence, during oral evidence, further informed :

“I think when we started IGMDP Programme especially in the areas of air defence and anti – tank weapons, we started from, as the Hon. Chairman said, the basic research. When we started from that stage up, be it the LCA programme or any other programme, we did not have the CFD programmes with us. Without that, designing of aircraft is difficult and that is why it has taken us this much time. I think that in the world anywhere, they may have taken five years less. That is about the time frame when you start from the basic research and you come up with a product. On upgrades, LCA is a single engine aircraft. If we want a twin engine LCA tomorrow, it is my understanding that we should be able to do it in a much shorter time frame. It may take five years or seven years to develop it, I do not think it will go beyond that. That is the position even with Nag. These are the first of types of missiles that are being made in the country. We should really see that with the infrastructure and the manpower that existed in the country, everything had to be trained to bring up to that level. If we continue with patience with these programmes, we will keep our design teams intact. If we start having doubts on our own capabilities and abilities, chances are that these design teams will all break up”.

6.11 To avoid the delay and have a better coordination in DRDO the Kargil Review Committee Report has inter alia submitted as under :

“A true partnership must be established between the Services and the DRDO to ensure that the latter gets full backing and funding from the Services and the former, in turn, get the indented equipment they acquire without undue delay”

**6.12 The Committee are of the opinion that the DRDO has made significant achievement in developing numbers of major weapon systems for the Indian Armed Forces. The Committee also feel that there has been developmental delays and in some cases may be even cost increases. But these programmes have led to achieving significant. It must be appreciated that when services procure systems from abroad, no equipment per se, has been designed specifically to meet with the requirements of Indian Armed Forces. Services on the other hand are willing to make compromise of putting into best use, available equipments from abroad, which are already in production to meet with their operational requirement. The Committee feel that if this flexibility can be shown to meet with the operational requirements using imported system, it is not clearly understood as to why the same benefit of flexibility can not be extended to indigenously developed systems.**

**To achieve this objective of self-reliance, the Committee feel that apart from strengthening the Defence PSUs and Ordnance Factories, private participation should also be encouraged in the areas, which the Government seems feasible. The Committee desire that the funding pattern of the projects undertaken by the DRDO, for the three services should be in the form of 70 % by DRDO, 20 % by the user service and 10 % by public/private sector manufacturing units. The Committee note that this model is being followed in some projects in Navy. The percentage of cost sharing can however, vary from project to project. This will also lead to increased economic activity in our industry, which could capitalise on defence technologies for civil sector applications, where there is immense potential. Further the Committee also feel that the armed forces should make it a point to prefer acquiring products built indigenously as per their specifications by giving firm commitments to the manufacturing units.**

**The Committee also feel that, the country is heavily dependent on imported weapons systems for its armed forces and some times disproportionately procured from a single Country. With changing geo-political**

**scenario, the Committee feel that it will be prudent to take steps towards ensuring greater production of weapons systems indigenously developed by DRDO and Indian private sector. The Committee are of the opinion that the Ministry of Defence should work out a scheme for providing viable economic incentives for manufacturing of indigenously developed products by the Defence PSUs, Ordnance Factories and Private Sector.**

**The Committee also observed that envisaging the future battle scenarios, networking of weapons, equipments, platforms, communication has become a need of hour and ,therefore, it may be necessary to develop weapon systems not on a one to one basis but as an integrated system. The Government may therefore, take a holistic view of the Defence Industry, particularly with reference to indigenisation and strive for ensuring objective of self-reliance.**

### **Induction of Light Combat Aircraft (LCA)**

6.13 The Ministry of Defence have stated that LCA Development Programme for building six Prototypes was sanctioned in August 1983 at a preliminary cost of Rs.560 crore. The cost was to be finalised after completion of Project Definition. Aeronautical Development Agency (ADA) was registered as a Society in 1984 to undertake coordinated development of LCA. It started functioning from mid 1985.

6.14 Indian Air Force (IAF) issued Air Staff Requirements (ASR) for LCA in October 1985 indicating a requirement of 200 LCA Fighters and 20 LCA Trainers. Project Definition Phase (PDP) of LCA Programme was completed in the year 1988 within the scheduled time frame and recommended building of seven LCA Prototype Vehicles (PVs).

6.15 In 1990, a decision was taken to undertake LCA development in two Phases. First Phase to build two Technology Demonstrators (TDs) along with development of other technologies including Multi-Mode Radar (MMR) and in the second Phase to build rest of the PVs, integrate Weapons, sensors and flight test the aircraft leading to initial operational clearance (IOC) and final operational clearance (FOC).

6.16 According to the Ministry, in April 1993, Government approved full scale engineering development (FSED) Phase-I at a cost of Rs.2,188.00 crore. Through effective and efficient management of sanctioned funds, two more PVs are being built within the funds allotted for FSED Phase-I absorbing Rupee escalation and foreign exchange (FE) conversion rate variations. US Government sanctions prohibiting imports of components caused a major set back to LCA Development Programme as 40 items of equipment for the LCA were being sourced from USA. This set back was countered through import substitution and third country source development initiative which was also funded out of the resources provided for FSED Phase-I.

6.17 In February 2000, based on the progress achieved, Interim Phase-2 of FSED was sanctioned at a cost of Rs.666.34 crore to undertake activities related to three more PVs including design and fabrication of LCA (Trainer). This sanction was to merge with the final FSED Phase-2 sanction.

6.18 After successful first flight of Technology Demonstrator – LCA (TD 1) and completion of first block of flight tests, Government has given sanction for FSED Phase-2 in November 2001, at a cost of Rs.3,301.78 crore. Phase 2 includes not only development of LCA leading to IOC and FOC, but also establishment of productionisation facility for 8 aircraft per annum and manufacture of eight pre-production aircraft. A Memorandum of Understanding (MOU) has been signed by ADA and Hindustan Aeronautics Ltd. (HAL) for Limited Series Production of eight LCAs.

6.19 The maiden flight of LCA (TD- 1) took place on 4<sup>th</sup> January 2001. The first block of flight test have been completed successfully which includes one flight showcasing LCA at Aero India 2001. LCA (TD-1) is updated with various performance improvement modifications and second block of flight test have been initiated. Maiden flight of Second Technology Demonstrator – LCA (TD-2), which was built to the post flight (Block-1) build standard of LCA (TD-1), occurred on 6 January 2002 and 44 flight tests during Block 1 Flight Test Phase have been completed.

6.20 Fuselage of the third aircraft – LCA (PV-1) has been redesigned to reduce weight of airframe and extended power on checks of LCA (PV-1) have been completed. Fabrication activity on the fourth aircraft – LCA (PV-2) which is the production standard LCA is in progress. Design activity on LCA Trainer variant – LCA (PV-5) has also been initiated. Kaveri engine has been sent to Russia (CIAM) for high altitude Test Bed Trials. Trials are likely to be completed by July, 2003. Probable Date of Completion (PDC) of FSED Phase-II is end 2008. Initial Operational Clearance (IOC) for LCA is slated for 2006/2007 and Final



Operational Clearance (FOC) is 2008/2009. Its induction in Air Force is expected by the end of the decade.

6.21 A total of 375 test flights have been completed till date including supersonic flights by the three prototype aircrafts and four more prototypes will be joining the flight-testing by the end of year 2005. Setting up of production facilities for a production of LCA is under progress at HAL. There is some slippage from the original schedule.

6.22 The Initial Operational Clearance (IOC) of the LCA is expected by 2007 and the Final Operational Clearance (FOC) by the year 2010. IAF is considering for placement of orders for LCA. Unit cost of LCA will be about Rs. 100 crore.

6.23 Kaveri Engine has completed 1300 hours of ground testing including high altitude test at CIAM, Russia. Government has enhanced funds for development of Kaveri Engine for LCA. Efforts are being made to integrate Kaveri Engine with LCA by March 2007.

6.24 The Ministry of Defence, in their Annual Report 2003-2004, have stated that the Kaveri Engine for the Tejas is under going development trials. As on date two Kabini prototypes ( C1, C2) and five Kaveri Engine prototypes (K1 to K5) have been built for engine testing apart from various modules and components manufactured for their testing in the rigs to asses their aerodynamic and structural integrity performance. Kaveri Engine has undergone development test of more than 1300 hours. K 5 engine of Kaveri has successfully completed phase I & II of high altitude testing at M/s CIAM, Russia. K 9 engine is presently under testing at GTRE, with an aim to integrate it with LCA ahead of post-production clearance. General arrangement for the new layout (K 10 configuration) addressing various issues, like improved surge margin in fan, better structural integrity of compressor and improved combustor pressure loss is being made with the objective to realize the weight budgeted engine and to firm up this configuration for production release. The spin-off project "Kaveri Marinisation" has been taken up and detailed design of the sub-systems have been completed. Fabrication and manufacturing work are under progress.

6.25 The project on 'Design and Development of Kaveri Engine' was originally sanctioned in April 1989 to Gas Turbine Research Establishment (GTRE), Bangalore at a cost of Rs. 382.81 crores (FE Rs. 155.39 crores) with a PDC of 93 months. Government had approved revision of cost to Rs. 1386 crores (FE Rs. 782 crores) and extension of PDC as Dec 2004, which is further revised to Rs. 2839 crores (FE Rs. 1730 crores) and extension of PDC as Dec 2009. The revision of cost from Rs. 1386 crores to Rs. 2839 crores has been approved

in two phases. A total of Rs. 719 crores have been approved for the first phase for interim flight trials to demonstrate reliability of the engine by Dec 2006. A sum of Rs. 734 crores has been approved for the second phase for full performance of the engine.

6.26 As on date a total of about 1300 hours of testing has been carried out on these prototype engines. Jet Fuel Starter (JFS) system for starting Kaveri Engine has been indigenously developed with assistance from GTRE, Bangalore by HAL and is being integrated with Kaveri Engine at GTRE, Bangalore.

6.27 The Ministry of Defence, during oral evidence further stated :

“ As far as LCA is concerned, we all know that LCA Programme has got delayed. It was started sometime around 1986 and it is still going on. We expect the first LCA to be given to the Indian Air Force by around 2007. We plan to induct the first Squadron into the Air Force between 2008 and 2010. That is the time schedule that has been given. As regards Kaveri Engine, it has had its problems. But we have been assured by the GTRE that these problems are getting ironed out. But at the same time a decision has been taken by the GTRE that the first 40 aircraft would be coming in with GE-404 engines. Therefore, by the time the Kaveri Engine develops and matures which will take place somewhere in the region of around 2010-2012, we expect that the first Kaveri Engine would get on to LCA in the period of around 2012. So, we have to programme for the LCA up to close to around 200 aircraft. Therefore, Air Force would be very keen because this is a national level project and we would be very keen to have Kaveri at all costs on to the LCA programme”.

- 6.28 The Committee express their serious concern over the inordinate delay to develop indigenous Kaveri Engine. Light Combat Aircraft (LCA) Project which was started in 1985, has still been showing time and cost overruns. The Committee desire that responsibility should be fixed for delays in both these projects. The Committee note that LCA is expected to be given to the Indian Air Force by around 2007. The Committee are further constrained to note that the project on Design and Development of Kaveri Engine was originally sanctioned in April 1989 to Gas Turbine Research Establishment (GTRE), Bangalore at a cost of Rs. 382.81 crore with PDC of 93 months, will now get on to LCA by 2012 at a revised cost of Rs. 2839 crore. They feel that the regular mid term review and reappraisal should be carried out to check further time and cost overruns. There should be system of Performance Audit for all DRDO projects.
- 6.29 In view of the foregoing, the Committee feel that no serious efforts are being made by the Ministry either in projecting realistic demand or in making a judicious selection of design and development of Kaveri Engine by DRDO and HAL jointly. The Committee, therefore, desire that the Ministry should not only explore all ways and means to complete the project as per schedule but also make it a financially viable option vis-à-vis fighter aircraft with similar technology available in the world market. The Committee would like to be apprised of the progress made by the Ministry in this regard.

NEW DELHI;  
21, April 2005  
1 Vaisakha, 1927 (Saka)

BALASAHEB VIKHE PATIL,  
Chairman,  
Standing Committee on Defence

**STATEMENT OF CONCLUSIONS/RECOMMENDATIONS OF THE STANDING  
COMMITTEE ON DEFENCE IN THE SECOND REPORT (2005-06)**

SL. NO	Para No (s)	Conclusion / Recommendation
1.	1.39, 1.40,1.41 & 1.42	<p><b>General Defence Budget</b></p> <p>The Committee are deeply concerned to note that the Ministry of Defence was compelled to surrender funds to the tune of Rs. 5,000 crore, Rs. 9,000 crore and Rs. 5,000 crore at the Revised Estimates stage of 2001-02, 2002-03 and 2003-04 respectively, to meet the deficits. The budgetary ceilings imposed by the Ministry of Finance in the year 2005-06 have led to the downsizing of the total projected capital requirements of the Defence Services from adequately Rs. 44123.86 crore to Rs. 34375.14 crore which fails to address the security concerns of the nation. The arbitrary caps on budget utilization over a period of time have taken a toll of almost all sectors of Defence like manpower in the Navy, the ongoing modernization, infrastructure development, procurement of equipment/ acquisitions, indigenisation and R&amp;D initiatives. The across the board cut applied by the Ministry of Finance on Defence expenditure without undertaking any exercise to check the ramifications of their decision on defence preparedness calls for an immediate review. The Committee feel that there should not be any cut or reduction in the defence budget by the Ministry of Finance at any stage.</p> <p>Closely related to the issue of Defence Preparedness and the ability to meet the threat perception is the quantum of funds available to our services. It is seen from the above that our Defence allocations as a percentage share of GDP since 1988-89 (year wise) have been between around 2 to 3 percent. However, considering the present defence expenditure of some of our neighbours and the present security scenario, the Committee feel that there is a need</p>

		<p>to fix a minimum percentage of our GDP which should be made available to defence forces at all costs every year. The Committee are aware of the fact that the precarious finances entail the Government to consciously fixed the level of Defence expenditure as a percentage of GDP after assessing the prevailing the threat perceptions and the present and future operational and modernization requirements of the services.</p> <p>The Committee, therefore, strongly recommends that 10% cut applied by the Ministry of Finance across the board over the years should be immediately reviewed to check further depletions of our Military assets. The Committee also desire that the Ministry of Defence should re-priorities their plans to ensure the optimum utilization of the available assets.</p> <p>The Committee are surprise to observe that in spite of its earlier recommendation, which was agreed to by the Government on setting up of Defence University i.e. National Institute for Defence and Strategic Studies/Central Defence University, No budget provision is made in this budget. The Committee strongly feel that this may be made on priority.</p>
2.	2.11, 2.12, 2.13 & 2.14	<p><b>Defence Planning</b></p> <p>The Committee are unhappy to note that the Ministry of Finance has failed to finalise the 10<sup>th</sup> Defence plan even after three years of the plan have passed. Non-finalisation of the 10<sup>th</sup> Defence Plan at its beginning by the Ministry of Finance has created a great deal of uncertainty about the availability of adequate finance for the acquisition of the vital equipment, modernization, etc. The Ministry of Defence had projected a demand of Rs. 4,97,000 crore in 2001 for the Tenth Plan. However, the Ministry of Finance has given indicative figure of Rs.4, 18,000 crore in December 2004,without any firm commitment. The total allocations in the first four years of Tenth Defence Plan just come to about Rs.2, 76,300 crore which is nowhere near their</p>

		<p>requirements. This gap between the demand and allocations, has adversely affected the defence planning and our preparedness. The Committee take a serious note of this and want the Government to finalise the Tenth Plan immediately and take steps to utilise the committed amount in full. The Committee would like to be apprised of the finalisation of the Plan as well as the follow-up steps being taken to utilise the total allocation of the Tenth Plan.</p> <p>The Committee also observe that due to non-finalisation of the Tenth Plan in time, the long term perspective plan of the Forces has got affected and is presently at the finalisation stage with a revised plan schedule spanning from 2007-2022. The Committee, while expressing their displeasure over the present situation, recommend that the Ministry of Defence should reorient the plans and strive to adhere to the schedules envisaged. As regard the 11<sup>th</sup> Plan, the Committee desire that it should be finalised at least an year before the plan period starts.</p> <p>It is high time that the Government prepared a road map for self-reliance. The Committee strongly feels that India should not be taken as a weapons/arms market by the global suppliers and action in this direction should be visible by the end of Tenth Defence Plan and 11<sup>th</sup> Plan should entirely be devoted to self-reliance.</p> <p>The Committee has also observed that the surveillance capabilities of our forces are in adequate. This is primarily due to non-availability of low-level radar systems with the three services. The Committee feel that all round effort should be undertaken by the Government to ensure that the entire country is covered. The Committee feel that the Ministry should explore all possibilities of acquiring the required radar systems in adequate numbers without any delay.</p>

3.	2.21 & 2.22	<p><b>CDS (Chief of Defence Staff)</b></p> <p>The Committee are constrained to note that despite their repeated recommendations in the past for establishment of the Chief of Defence Staff (CDS), Government has not yet come to any decision on the creation of the post even after more than three years has elapsed. The Committee further note that in the existing structure for higher defence management viz. the Chief of Staff Committee had not been able to optimally perform their role and functions in bringing together and promoting co-ordination amongst the Services.</p> <p>The Committee feel that keeping in view the security scenario of the country and in order to provide single military advice to the Government and to give administer strategic forces and to enhance the efficiency and effectiveness of the planning process, there is an imperative need to create the post of CDS to provide a focal point for better co-ordination among the three services in the long term perspective plan in conventional and strategic capabilities, prioritise R &amp; D activities and provide effective co-ordination leading to the path of self-reliance.</p> <p>The Committee desire that Government should give serious consideration to the recommendations of the Committee.</p>
4.	3.8, 3.9, 3.10 & 3.11	<p><b>Army- Modernisation of Indian Army</b></p> <p>The Committee note that modernisation of Armed Forces is a continuous process which requires long term planning and huge investments. The Ministry of Defence have undertaken a plan to modernise the Indian Army and to equip with the latest machine and equipment so that it can meet the security requirements of the country. The Committee note that during the three years of the Tenth Plan period, the stress primarily was on the modernisation of the infantry battalions and the special forces. The Committee further note that as far as special forces are concerned, 40</p>

	<p>items of various kinds have been identified for modernisation. Efforts are being made to modernise and upgrade the weapons and weapon systems of the Army to prepare it to address the requirements of modern day warfare. These efforts cover the ability to exercise surveillance up to a distance of three kilometres of infantry battalion detection of infiltration by troops or vehicles in areas not physically held, destroying targets like vehicles, stores dumps and troop clusters, neutralise enemy commanders, various kinds of equipment, Battle Field Surveillance Radars, High Resolution Binoculars, Night Vision Devices, Thermal Imaging Sight for ATGM Launch, Mechanised Forces and their equipments, induction of T-90 and Arjun Tanks and T-72 Tanks.</p> <p>From the presentation made by the Army before the Committee, it is observed that the number and type of weapons available with the Army are much less as compared to their requirements.</p> <p>The Committee, therefore, keeping in view the threat perceptions, advances in technology with special emphasis on Information Technology and geo-political environment, strongly recommend that there is an imperative need to prepare a long term policy to modernise the Indian Army and upgrade their weapon systems in areas identified by the Army and desire that a time bound programme should be drawn to acquire those weapons etc. and also ensure proper financial allocations for the purpose. The Committee desire that the quality of the equipment etc. should be the best available in the market which can enhance the combat efficiency of the soldiers in an effective manner. The Committee feel that our priority should be to equip the infantry man with superior light weight weapons and equipment &amp; clothing.</p> <p>The Committee are of the opinion that there needs to be a more focused thrust on development, production of indigenous equipment into the Army, with particular reference to the Arjun Main Battle Tank. It is</p>
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		<p>understood that though a limited order for 124 number of these tanks have been placed, the first production models are being further subjected to additional performance trials by the Army. This is primarily due to the unstated concern over quality control at the Ordnance Factory, Avadi at time of issue, which must be ensured by the Ordnance Factory Board to the satisfaction of the user.</p> <p>The Committee are surprised to note that instead of giving firm order for sufficient number of Arjun Tanks by indigenous production, only a very small order has been placed and the Government has decided to acquire tanks from a foreign country to meet its requirement. Having incurred an expenditure of approximately Rs. 3,300 crores on the development and productionisation of the MBT Arjun, the Committee are of the firm opinion that the Arjun must be inducted into the Army in large numbers, for which an initial production order for 50 tanks must be placed on Heavy Vehicles Factory, Avadi. This does not absolve DRDO (AHSP for Arjun Tank) and the Ordnance Factory Board of their prime responsibility to ensure that the production model of the tank meets the user requirement in every respect. The procurement plan of the Army must be structured (or re-structured if necessary) to provide for induction of increased numbers of Arjun Tanks by the 11<sup>th</sup>, 12<sup>th</sup> Army Plans, as a replacement for T-72 Tanks.</p>
5.	3.15	<p><b>Army - Procurement of Guns for Indian Artillery</b></p> <p>The Committee note that the Indian Army is facing critical shortage of wheeled Self Propelled (SP) guns of the required standard. The Ministry have informed that though the request for proposals for its procurement was issued to 11 vendors in response to which 5 bids were received and one gun has been finally found to be matching the qualitative requirements. The Committee are, however, surprised to note that no fields trials were held to decide the suitability</p>

		<p>or otherwise of the bids received which is the normal procedure. The Committee also note that trials are still continuing for the procurement of tracked SP Guns and towed Guns. The delay in the procurement of such crucial weaponry has adversely affected the modernisation of schemes of the defence sources resulting in wastage of a lot of time. The Committee feel that global RFP should have been issued in the first instance to avoid the single vendor situation. The Committee now want immediate decision to be taken to procure the guns at the earliest. The Committee further recommend that R &amp; D efforts for their indigenous production should go simultaneously with the acquisition programme of the Ministry so that Artillery is not made to face the shortage of critical components of the weapons system.</p>
6.	3.19	<p><b>Army - Phasing out of Cheetah/Chetak Helicopters</b></p> <p>The Committee note that the Army is looking for alternative options for replacement of Cheetah Helicopters with state-of-the-art helicopters available in the global market. The Committee, keeping in view the requirement of superior reliability and endurance in high altitude areas, rapid response to emerging situations in combating terrorism, desire that the Ministry should also examine the feasibility to upgrade existing Cheetah/ Chetak fleets before inducting the new helicopters. The Committee also desire that efforts should be made to modify the configuration of Dhruv Helicopters so as to make it operate at high altitude regions. The Committee also desire that a time bound road map for indigenous manufacturing of helicopters should also be drawn up at the earliest. The Committee hope and trust that sufficient financial allocations are made available to make the new purchases in a time-bound manner.</p>
7.	3.23	<p><b>Army - System of Delivery of Justice under Military Law</b></p> <p>The Committee, keeping in view the Law</p>

		<p>Commission recommendations and increase in number of court cases arising out of personnel matters feel that Government should create separate mechanism to resolve them for the settling of Armed Forces court cases. The Committee, therefore, earnestly desire that the modalities for the setting up of new mechanism may be worked out expeditiously to deal with all personnel court cases. The Committee would like to be apprised of the progress made by the Ministry in this regard within 3 months after presentation of this report.</p>
8.	<p><b>3.32, 3.33, 3.34, 3.35, 3.36, 3.37 &amp; 3.38</b></p>	<p><b>Army - Modernisation of Ordnance Factories</b></p> <p>The Committee note that a modernisation plan which envisages upgrading technology, augmenting capacities and replacement of old/obsolete plant and machinery with those having state-of-the-art Technology has been prepared. Further Modernisation and automation of the infrastructure in the Ordnance Factories is also being done to meet the quantitative and qualitative demand of the end products.</p> <p>The Committee further note that in addition to significant amounts sanctioned under the Head "New Capital" an amount of Rs. 250 Crores has been projected by the Ministry in the Budget Estimates 2005-06 for modernisation involving replacement of old and serviceable plant and machinery.</p> <p>The Committee are given to understand that the basic problems of the Ordnance Factories are how to augment the revenue resources and their capacity to increase the annual rate of production.</p> <p>From the foregoing, the Committee are of the view that for augmenting revenue resources and production capacities of the Ordnance Factories, there is a need to significantly change the character and nature of working of these Factories by conferring on them status of Public</p>

	<p>Sector undertakings and running them on commercial lines like the PSUs. This change of the ordnance factories would enable them to raise funds from market, private banks and through Public Issue. Thus Ordnance Factories would gradually become not only financially viable but also strong enough to increase their production capacity, as envisaged. The Committee, also desire that these Ordnance Factories should take upon themselves the task of peripheral development and social work responsibilities in area of their operation like other PSUs. The Ordnance Factories can involve private sector in product upgradation and value addition wherever feasible.</p> <p>The Committee desire that an in-depth study of the modernisation requirements of each ordnance factory, based on its future requirements, should be carried out and a time-bound programme should be chalked out to modernise the ordnance factories.</p> <p>There is also an unstated perception in the Defence Forces regarding unsatisfactory quality control of equipment produced by the Ordnance Factories. They establish their credibility with their main customers, the Armed Forces. The Committee desire that a vigorous quality maintenance drive be carried out in the Ordnance Factories, so that the Armed Forces are not hesitant about the quality of equipment and stores supplied to them from Ordnance Factories. The Committee also desire that Quality Control Organisation may be reviewed and re-structured including transferability of HRD posts. Supplier - Quality Control and user Committee should be established and Quality Control Authority be responsible to the user.</p> <p>It has been brought out that outdated ammunition is either put on fire or sometime fire takes place of obsolete ammunition. In all parts of the world, there is a complete service which is available for re-cycling of ammunition. The process consists of dismantling the shell and removal of explosives. The entire machinery is</p>
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		<p>self contained and consists of a Mobile Modular Complex with sub-modules with the help of electric generators can be operated by virtue of which the obsolete ammunition is re-cycled by the state of art technology over other methods of destroying or otherwise disposing outdated ammunition. All types of ammunition can be demilitarised from small arms i.e. grenades of bigger Missiles.</p> <p>The Committee are of the opinion that steps should be taken immediately to have the complete services for re-cycling of the obsolete ammunition so as to yield substantial quantities of usable explosives, ferrous/non-ferrous metals. Besides, it saves the lives of lot of people.</p>
9.	4.16, 4.17, 4.18, 4.19, 4.20 & 4.21	<p><b>Navy- Indigenisation and Modernisation of Indian Navy</b></p> <p>The Committee note that for modernisation of the Indian Navy and review of the existing force level a total of 12 ships and 24 aircraft have so far been inducted in the 10<sup>th</sup> Plan period (2002-2007) till now, as against the directive of Defence Acquisition Council that the total number of ships does not fall below 140 in number. The Committee further note that in pursuance of this directive 10 year (up to 2012) ship building plan was envisaged for induction of 83 vessels of various categories viz. aircraft carriers, warships, submarines, support ships and training ships. 19 ships are presently under construction (excluding Admiral Gorshkov) and cases for acquisition of 24 new ships and 6 submarines and 11 aircraft are being processed.</p> <p>As regards the Mine Counter Measure Vessels (MCMVs), the Committee are constrained to note that out of the 12 ocean going MCMVs available with the Navy, with the planned de-induction of 8 vessels from 2006-08 the MCMVs force level would drop to 4 vessels. The Committee are given to understand that the requirement of 8 MCMVs has been included in</p>

	<p>this plan and the Ministry of Defence is processing the case for acquisitions of 8 MCMVs for Navy. The Committee, therefore, hold the view that after de-induction of 8 vessels from 2006-08, it has become imperative that the Government should expeditiously complete the processing of this case for acquisition of 8 MCMVs for the Navy as per schedule.</p> <p>The Committee note that there have been shortfalls in certain critical areas like surveillance, mainly in terms of long range aircraft, and acquisition of submarines. The Committee desire that immediate steps should be taken to meet the above requirements of the Navy in a time-bound manner. The Committee also desire that sufficient funds should be provided to the Navy to meet the requirements.</p> <p>The Committee note that the technical expertise gained by the country in the construction of submarine (Mazagon Dock Limited) would be lost, if the orders are not placed for above mentioned dockyard, as the last submarine constructed by Mazagon Dock was in 1994. This has affected even the private sector which participated in construction of submarine in the past. The Committee note that no action has been taken by the Government on their earlier recommendation(s). The Committee desire that immediate decision should be taken on all the indigenous production of submarine and other ships and firm orders should be placed on the Mazagon Dock limited without any loss of time.</p> <p>In view of the foregoing, the Committee, in the interest of the security of the nation, strongly desire that the naval preparedness should not be affected at any cost. The progress of the Navy's expenditure and status of ongoing/new schemes should be constantly reviewed for taking corrective measures during the plan period. The Navy has also highlighted the shortage of manpower in critical areas. This a matter of crucial importance. The Committee desire that the Government should immediately review its policy of recruitment in the context of the Navy</p>
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		<p>and allow it to recruit the necessary manpower.</p> <p>The Committee also earnestly desire that the Ministry should take effective steps in order to strictly adhere to the directives of the Defence Acquisitions Council that total number of ships does not fall below 140 in number.</p>
10.	4.28	<p><b>Navy- Construction of Air Defence Ship</b></p> <p>Keeping in view the vast maritime expanse of the country, the Committee note that the Indian Navy urgently requires three aircraft carriers – one for the eastern coast, second for the western coast and third one required to address the maintenance/repair needs of the other two carriers. The Committee note that during the Budget Estimates 2004-05, Rs. 200 crore was allocated to the project of Air Defence Ship but at the RE stage the amount was reduced to Rs. 0.47 crore in view of the difficulties associated with acquisition of materials for its construction. During the Budget Estimates 2005-06 Rs. 245 crore has been allocated to the project. The Committee take a serious note on non utilisation of allocated funds by the Navy, which has adversely affected construction of the Aircraft Carrier. The Committee also note that the aircraft carrier Admiral Gorshkov would be handed over to the Navy by the end of 2008. By that time Navy would be depending on the ageing INS Virat which is expected to be de-commissioned by 2009-10. Thus after 2010 Indian Navy will have to rely on the services of Admiral Gorshkov only. As the delivery of indigenous Air Defence Ship would not take place before 2012, the Committee feel that there is an urgent need to address the coastal surveillance of the country during this interregnum. The Committee, therefore, strongly recommend that necessary infrastructure should be immediately created so that the construction of one more aircraft carrier of the Gorshkov standard may be undertaken simultaneously on the line of ongoing project of the construction of Air Defence Ship, thereby making the Indian</p>

		<p>Navy self-reliant in terms of the number of aircraft carriers. The Committee hope that sufficient funds are allocated during the current financial year for the construction of the aircraft carrier would be fully and properly utilised and efforts would be initiated in the direction of undertaking one more similar project. The Committee also desire that Government should ensure that adequate funds are made available for the purpose.</p>
11.	4.38, 4.39 & 4.40	<p><b>Navy - Project Seabird</b></p> <p>The Committee note that the cost of the Project Seabird was revised from Rs. 1294.41 crore to Rs. 2459.20 crore in September 2003 and the created infrastructure is being progressively commissioned. The Committee further note that major facilities like Depot/ Administrative Building, Naval Hospital, Naval Store, Water, Electricity etc. are likely to be completed by 2005 in a phased manner.</p> <p>The Committee, keeping in view the cost and time overruns of Phase-I project, recommend that Ministry should take all steps to ensure that Phase - I of the project, must be completed as per revised schedule. The Committee also desire that revised funds allocated for the purpose should be utilised prudently and effectively as envisaged by the Ministry for completion of Phase-I project. The Committee also desire that second phase of the Seabird should be taken up without loss of time on completion of phase-I. Considering the fact that the cost of completion of phase-I had been revised from Rs. 1294.41 crore to Rs. 2459.20 crore, the committee desire that all out efforts should be made by the Ministry to complete the second phase of the project in a time-bound manner without any cost and time overrun.</p> <p>The Committee also note with concern that due to ten percent cut imposed by the Ministry of</p>



		<p>Finance on recruitment of civilian manpower of Navy, it would be difficult to fully operationalise the Seabird project. The Committee taking note of the fact that 52% of the manpower in Navy is from civil but technical, the Ministry of Finance should not impose any restriction of their recruitment. The Committee would like to be apprised of the progress made in this regard.</p>
12.	5.11, 5.12, & 5.13	<p><b>Air Force- Inventory Management and Force Multipliers</b></p> <p>The Committee note with serious concern that out of 39.5 projected squadrons, Air Force has now only 37 squadrons, which shows shortage of 2.5 or three squadrons. The Committee further note that by end of the Tenth Plan this shortage would increase. Further, by the end of 12<sup>th</sup> Plan the shortage will be almost 1/3<sup>rd</sup> of the projected strength.</p> <p>The Committee, therefore, in the interest of the security of the nation, would like to recommend strongly that Ministry should make all efforts to keep the required number of squadrons by simplifying their acquisition procedure and minimising the delay in acquisition of new aircraft. The Committee also desire that our indigenous production capacities should also be suitably enhanced. The Committee are of the view that there is also an urgent need to plan for acquisition of fifth generation fighter aircraft to take care of our defence needs in future.</p> <p>The Committee note that the Air Force has 26 different types of aircraft which require different types of infrastructure to operate. The Committee feel that there is need to check the large inventory and acquire as far as possible similar type of aircraft as have been already in service with the Air Force. The Committee desire that the facilities created by HAL should be put for optimum use before any such further investment is made in such projects. For this, the Committee desire that firm order for the manufacture for required number of the Light</p>

		<p>Combat Aircraft (LCA) should be given to HAL by the Air Force. This will also ensure timely replacement of ageing MIG-21 fleet. The Committee note with concern that the required number of different types of Radars specially low level surveillance Radars to meet the operational requirements of the Air Force are not available with them. The Ministry should ensure that these are available in the shortest possible time to improve the low level of surveillance capability to cover the whole geographical areas of the country. The Ministry should explore all ways and means to procure improved system in required number. The Committee would like to be kept informed about the concrete steps taken by the Ministry in this regard.</p>
13.	5.23	<p><b>Air Force - Development of Indigenous Jet Trainer</b></p> <p>The Committee note that the Government approved the indigenous design and development of Intermediate Jet Trainer (HJT – 36) by HAL way back in 1999 as a replacement of ageing Kiran aircraft. Even after the passage of six years the final operational clearance of the trainer has not yet taken place. Though the prototypes of the trainer have so far completed 150 flights towards its development plan, the results have not been found to be satisfactory. The Committee note with concern that the flight testing of the prototypes is being undertaken with French Larzac engine and Russian AL-55 I engine the indigenous version of which has still not been developed. The Committee also note that once successfully developed, the trainer may be configured to meet the requirements of second stage training of Indian Air Force pilots.</p> <p>The Committee, therefore, recommend the Ministry to intensify their R&amp;D efforts to develop the indigenous engines for HJT-36. Keeping in view the prospects of developing the HJT-36 into a futuristic Advanced Jet Trainer, the Committee also recommend that efforts need to be expedited to develop its configuration on the line of AJT Hawk to be procured from U.K so as to</p>

		<p>address the need of third stage training of Indian Air Force.</p> <p>In this connection, the Committee also note that the existing front line fighter fleet of the Indian Air Force would have reached the end of their service life by 2020-2025, and be due for replacement by that time. The Committee were also given to understand that some discussions were under way with a foreign country for design of new fifth generation fighter aircraft. The Committee strongly feel that coordination efforts between the DRDO, the Air Force, Hindustan Aeronautics Limited and other consultants must be initiated at the earliest, and development of an indigenous Multi-Role Combat Aircraft' be formally commenced; so that it could replace the current fleet in the time-frame 2020-2025 so that there should be no gap in Air Force resources.</p>
14.	6.12	<p><b>DRDO</b></p> <p>The Committee are of the opinion that the DRDO has made significant achievement in developing numbers of major weapon systems for the Indian Armed Forces. The Committee also feel that there has been developmental delays and in some cases may be even cost increases. But these programmes have led to achieving significant. It must be appreciated that when services procure systems from abroad, no equipment per se, has been designed specifically to meet with the requirements of Indian Armed Forces. Services on the other hand are willing to make compromise of putting into best use, available equipments from abroad, which are already in production to meet with their operational requirement. The Committee feel that if this flexibility can be shown to meet with the operational requirements using imported system, it is not clearly understood as to why the same benefit of flexibility can not be extended to indigenously developed systems.</p> <p>To achieve this objective of self-reliance, the Committee feel that apart from strengthening the</p>

		<p>Defence PSUs and Ordnance Factories, private participation should also be encouraged in the areas, which the Government seems feasible. The Committee desire that the funding pattern of the projects undertaken by the DRDO, for the three services should be in the form of 70 % by DRDO, 20 % by the user service and 10 % by public/private sector manufacturing units. The Committee note that this model is being followed in some projects in Navy. The percentage of cost sharing can however, vary from project to project. This will also lead to increased economic activity in our industry, which could capitalise on defence technologies for civil sector applications, where there is immense potential. Further the Committee also feel that the armed forces should make it a point to prefer acquiring products built indigenously as per their specifications by giving firm commitments to the manufacturing units.</p> <p>The Committee also feel that, the country is heavily dependent on imported weapons systems for its armed forces and some times disproportionately procured from a single Country. With changing geo-political scenario, the Committee feel that it will be prudent to take steps towards ensuring greater production of weapons systems indigenously developed by DRDO and Indian private sector. The Committee are of the opinion that the Ministry of Defence should work out a scheme for providing viable economic incentives for manufacturing of indigenously developed products by the Defence PSUs, Ordnance Factories and Private Sector.</p> <p>The Committee also observed that envisaging the future battle scenarios, networking of weapons, equipments, platforms, communication has become a need of hour and ,therefore, it may be necessary to develop weapon systems not on a one to one basis but as an integrated system. The Government may therefore, take a holistic view of the Defence Industry, particularly with reference to indigenisation and strive for ensuring objective of self-reliance.</p>
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15.	6.28 – 6.29	<p><b>Light Combat Aircraft (LCA)</b></p> <p>The Committee express their serious concern over the inordinate delay to develop indigenous Kaveri Engine. Light Combat Aircraft (LCA) Project which was started in 1985, has still been showing time and cost overruns. The Committee desire that responsibility should be fixed for delays in both these projects. The Committee note that LCA is expected to be given to the Indian Air Force by around 2007. The Committee are further constrained to note that the project on Design and Development of Kaveri Engine was originally sanctioned in April 1989 to Gas Turbine Research Establishment (GTRE), Bangalore at a cost of Rs. 382.81 crore with PDC of 93 months, will now get on to LCA by 2012 at a revised cost of Rs. 2839 crore. They feel that the regular mid term review and reappraisal should be carried out to check further time and cost overruns. There should be system of Performance Audit for all DRDO projects.</p> <p>In view of the foregoing, the Committee feel that no serious efforts are being made by the Ministry either in projecting realistic demand or in making a judicious selection of design and development of Kaveri Engine by DRDO and HAL jointly. The Committee, therefore, desire that the Ministry should not only explore all ways and means to complete the project as per schedule but also make it a financially viable option vis-à-vis fighter aircraft with similar technology available in the world market. The Committee would like to be apprised of the progress made by the Ministry in this regard.</p>

**ANNEXURE - I****MINISTRY OF DEFENCE**

(Rs. in Crores)

	<b>RE 2004-05</b>	<b>BE 2005-06</b>
<b><u>REVENUE SECTION</u></b>		
1. COAST GUARD ORGANISATION	280.95	325.03
2. JAMMU AND KASHMIR LIGHT INFANTRY	NA	255.00
2. SECTT. GENERAL SERVICES		
i. DEPTT. OF DEFENCE	44.17	54.31
ii. DEPTT. OF DEFENCE PRODUCTION	6.44	6.90
iii. DEPTT. OF DEFENCE RESEARCH AND DEVELOPMENT	0.44	0.48
iv. D/O EX-SERVICEMEN WELFARE	NA	2.01
v. DEFENCE ACCOUNTS DEPTT. (DAD)	462.45	509.35
vi. DEFENCE ESTATE ORGANISATION (DEO)	48.47	49.57
<b>TOTAL SECTT. GENERAL SERVICES</b>	<b>842.92</b>	<b>1202.65</b>
3. CANTEEN STORES DEPTT.	5715.80	5669.02
4. MAINTENANCE – DAD OFFICE BUILDINGS	4.73	5.26
5. MAINTENANCE – DEO OFFICE BUILDINGS	0.25	0.25
6. MAINTENANCE- DAD HOUSING	6.44	7.15
7. ARMY PURCHASE ORGANISATION	1.48	1.56
8. SUBSIDY IN LIEU OF INTEREST –		
a) MAZAGAON DOCK LTD. (MDL)	0.58	0.33
b) MIDHANI	0.05	0.00
<b><u>TOTAL REVENUE SECTION</u></b>	<b>6572.25</b>	<b>6886.22</b>
LESS RECEIPTS GENERATED BY CSD (-)	6000.00	5915.39

<b><u>NET REVENUE SECTION</u></b>	572.25	970.83
<b><u>CAPITAL SECTION</u></b>	400.00	500.00
1. ACQUISITION – COAST GUARD ORGN.	3.88	7.50
2. CONSTRUCTION – DAD OFFICES	2.70	2.50
3. CONSTRUCTION – DEO OFFICES	10.00	8.00
4. CONSTRUCTION – CSD OFFICES	5.29	5.29
5. CONSTRUCTION – DAD HOUSING	2.84	2.84
6. CONSTRUCTION – DEO HOUSING	1.00	1.00
7. CONSTRUCTION – CSD HOUSING	2.04	2.04
8. MISCELLANEOUS	427.75	529.17
<b>NET CAPITAL SECTION</b>		
<b>TOTAL GRANT NET (Net Revenue +Capital )</b>	1000.00	1500.00

**ANNEXURE – II****DEFENCE PENSIONS**

(Rs .in Crores)

	<b>R.E. 2004-05</b>	<b>B.E. 2005-06</b>
ARMY	10937.65	11415.40
NAVY	303.15	324.03
AIR FORCE	681.20	712.57
<b>TOTAL</b>	11922.00	12452.00



**ANNEXURE – III****ARMY**

<b>Minor Head</b>	<b>R.E. 2004-2005</b>	<b>B.E. 2005-2006</b>
<b><u>Revenue</u></b>		
101- P & A – Army	12698.51	13122.41
103- P & A – Aux. Forces	217.10	228.10
104- P & A- Civilians	1374.42	1439.35
105 – Transportation	1123.66	1238.79
106 – Military Farms	157.15	159.15
107- ECHS	93.42	129.69
110 – Stores	8770.63	9903.55
111- Works	2858.51	2819.36
112- Rashtriya Rifles	1221.88	1347.02
113- National Cadet Corps	315.70	325.72
800 – Other Expenditure	771.89	998.04
<b>Total Gross</b>	<b>29602.87</b>	<b>31711.18</b>
Receipts / Recoveries	1034.65	850.00
<b>Total Net</b>	<b>28568.22</b>	<b>30861.18</b>
<b><u>Capital</u></b>		
Land	20.50	740.00
Works	1210.62	2233.31
Aircraft	722.47	939.13
Vehicles	285.12	504.71
Other Eqpt	3524.16	4212.62
DGOF Supplies	1441.86	1313.83
Mily. Farms	5.00	6.00
Rolling Stock	33.86	95.85
ECHS	41.00	18.00
Rashtriya Rifles	31.81	23.69
National Cadet Corps	3.90	6.00
Stock Suspense	0.00	0.00
Other Expenditure	0.00	0.00
<b>Total Capital</b>	<b>7320.30</b>	<b>9427.14</b>
<b><u>Total Revenue / Capital</u></b>	<b>35888.52</b>	<b>40288.32</b>

**ANNEXURE – IV****NAVY**

(Rs. in Crores)

<b>Minor Head</b>	<b>R.E. 2004-2005</b>	<b>B.E. 2005-2006</b>
<b><u>Revenue</u></b>		
101 – P & A Navy	816.56	865.35
102 – P & A – Reservists	0.00	0.00
104 – P & A – Civilians	584.54	616.16
105 – Transportation	135.62	149.89
106 – Repairs & Refits	423.35	900.00
110 – Stores	2541.93	2600.00
111 – Works	390.64	410.00
800 – Other Expenditure	133.38	140.00
112 – Joint Staff	320.51	424.55
<b>Total Gross</b>	<b>5346.53</b>	<b>6105.95</b>
Receipts / Recoveries	47.11	78.60
<b>Total Net</b>	<b>5299.42</b>	<b>6027.35</b>
<b><u>Capital</u></b>		
Land	1.45	49.85
Works	164.87	156.73
Aircraft	1814.93	1258.95
Vehicles	2.63	7.00
Other Eqpt	1098.03	1167.87
Fleet	4134.26	5417.70
Dockyards	564.04	722.48
Joint Staff	247.87	445.48
Capital Recovery	0.00	0.00
<b><u>Net Capital</u></b>	<b>8028.08</b>	<b>9225.65</b>
<b>Total Revenue / Capital</b>	<b>13327.50</b>	<b>15253.00</b>

**ANNEXURE – V****AIR FORCE**

<b>Minor Head</b>	<b>R.E. 2004-2005</b>	<b>B.E. 2005-2006</b>
<b><u>Revenue</u></b>		
101- P & A – Air Force	2001.05	2020.90
104- P & A – Civilians	304.35	312.81
105- Transportation	180.20	173.44
110 – Stores	5321.09	5826.00
111- Works	740.51	717.50
200- Spl. Projects	0.50	0.00
800 – Other Expenditure	129.10	142.02
<b><u>Total Gross</u></b>	<b>8676.80</b>	<b>9192.67</b>
Receipts / Recoveries	169.25	188.06
<b><u>Total Net</u></b>	<b>8507.55</b>	<b>9004.61</b>
<b>Capital</b>		
Land	7.88	1.20
Works	453.08	430.51
Aircraft	13480.75	9564.90
Vehicles	0.96	4.50
Other Eqpt.	1324.05	2792.04
Spl. Projects	9.55	11.00
<b><u>Total Capital</u></b>	<b>15276.27</b>	<b>12804.15</b>
<b>Total Revenue / Capital</b>	<b>23783.82</b>	<b>21808.76</b>

**ANNEXURE – VI****DGOF**

<b>Minor Head</b>	<b>R.E. 2004-2005</b>	<b>B.E. 2005-2006</b>
<b><u>Revenue</u></b>		
001- Direction & Admin.	42.49	46.90
004- Research	8.50	10.00
052- Mach. & Eqpt.	12.87	13.76
054- Manufacture	2015.42	2117.83
105- Transportation	60.00	61.45
110 – Stores	3344.13	3867.33
111- Works	62.00	70.00
106 – Renewal & Replacement	250.00	250.00
797 – Transfer to R/R Fund	250.00	250.00
800 – Other Expenditure	470.23	501.85
Supplies to Services	- 5495.45	-6029.68
<b><u>Total Gross</u></b>	<b>1020.19</b>	<b>1159.44</b>
Receipts / Recoveries	1313.82	1623.72
<b><u>Total Net</u></b>	<b>- 293.63</b>	<b>-464.28</b>
Capital		
Mach & Eqpt.	6.97	116.86
Works	131.27	206.23
Suspense	-3.39	13.25
<b><u>Total Capital</u></b>	<b>134.85</b>	<b>336.34</b>
<b><u>Total Revenue / Capital</u></b>	<b>-158.78</b>	<b>-127.94</b>

**Supplies to Services**

Army	5129.26	5580.80
Navy	69.43	124.89
Air Force	192.20	230.73
Others	104.56	93.26
<b>Total</b>	<b>5495.45</b>	<b>6029.68</b>

**ANNEXURE – VII****R & D**

(Rs. in Crores)

<b>Minor Head</b>	<b>R.E. 2004-2005</b>	<b>B.E. 2005-2006</b>
<b><u>Revenue</u></b>		
003-Training	4.26	5.54
004-Research / Research Development	498.74	584.50
101- P & A – Service Personnel	46.36	47.86
102- P & A – Civilians	527.90	548.59
105- Transportation	40.80	44.87
110- Store	1027.88	1304.62
111- Works	220.72	225.95
800- Other Expenditure	53.55	62.55
<b><u>Total Gross</u></b>	<b>2420.21</b>	<b>2824.48</b>
Receipts / Recoveries	10.00	10.00
<b>Total Net</b>	<b>2410.21</b>	<b>2814.48</b>
Capital		
Machinery & Equipment	973.99	2138.34
Works	362.92	403.52
<b>Capital</b>	<b>1336.91</b>	<b>2541.86</b>
<b><u>Total Revenue / Capital</u></b>	<b>3747.12</b>	<b>5356.34</b>

**ANNEXURE – VIII****DGQA**

(Rs. in Crore)

	<b>R.E. 2004-2005</b>	<b>B.E. 2005-2006</b>
<b><u>Revenue</u></b>		
1. Pay & Allowances	232.35	240.35
2. Miscellaneous	21.6	12.50
3. Transportation	9.50	10.00
4. Stores	78.50	91.50
5. Works	27.85	27.85
6. Departmental Canteens	0.02	0.02
7. Information Tech.	4.30	5.00
8. Training of Civilian Personnel	0.35	0.30
Total Gross	<b>374.53</b>	<b>387.52</b>
Receipts / Recoveries	14.00	6.00
<b><u>Total Net</u></b>	<b>360.53</b>	<b>381.52</b>
<b>Total Capital</b>	<b>51.29</b>	<b>40.00</b>
<b><u>Total Revenue / Capital</u></b>	<b>411.82</b>	<b>421.52</b>

## **MINUTES OF THE TWENTIETH SITTING OF THE STANDING COMMITTEE ON DEFENCE (2004-2005)**

The Committee sat on Monday, the 21 March, 2005 at 1730 hrs to 2000 hrs in Committee Room 'E', Parliament House Annexe, New Delhi.

### **PRESENT**

Shri Balasaheb Vikhe Patil- Chairman

### **MEMBERS**

#### **LOK SABHA**

2. Shri Churchill Alemao
3. Shri Iliyas Azmi
4. Shri Thupstan Chhewang
5. Smt. Sangeeta Kumari Singh Deo
6. Shri Milind Deora
7. Shri Suresh Kalmadi
8. Dr. C.Krishnan
9. Dr. K.S. Manoj
10. Shri Manvendra Singh

#### **RAJYA SABHA**

11. Dr. Farooq Abdullah
12. Gen. (Retd.) Shankar Roy Chowdhury
13. Smt. N.P.Durga
14. Shri Janardan Dwivedi
15. Shri Anand Sharma
16. Shri Lalit Suri

### **SECRETARIAT**

- |    |                     |   |                  |
|----|---------------------|---|------------------|
| 1. | Shri. P.D.T. Achary | - | Secretary        |
| 2. | Shri P.K. Bhandari  | - | Director         |
| 3. | Smt.Anita Jain      | - | Deputy Secretary |
| 4. | Shri D.R.Shekhar    | - | Under Secretary  |

**LIST OF WITNESSES OF MINISTRY OF DEFENCE**

1.	Shri Ajai Vikram Singh	-	Defence Secretary
2.	Ms. Somi Tandon	-	Secretary (Defence Finance)
3.	Shri M. Natrajan	-	SA to RM
4.	Shri Shekhar Dutt	-	Secretary (DP)
5.	Shri H.C. Gupta	-	Special Secretary (Acquisition)
6.	Shri Ranjit Issar	-	Additional Secretary (I)
7.	Shri S. Banerjee	-	AS(DP)
8.	Dr. (Smt.) Rekha Bhargava	-	Addl. Secy (B)
9.	Ms. Sheela Bhide	-	FA(Acquisition)
10.	Shri Bimal Julka	-	JS(G/Air)
11.	Shri Gautam Chatterjee	-	JS(O/N)
12.	Shri Ranjan Chatterjee	-	JS(E)
13.	Shri P.K. Rastogi	-	JS(T) & CAO
14.	Shri S.K. Sharma	-	JS & AM(Air)
15.	Shri P.K. Anand	-	JS & AM(LS)
16.	Dr. Thomas Mathew	-	JS & AM (MS)
17.	Dr. A. Sivathanu Pillai	-	CCR&D (NS ACE) & DS
18.	Shri K.V. S.S. Prasad Rao	-	CCR&D (TMS) & DS
19.	Dr. Dipankar Banerjee	-	CCR&D (AMS) & DS
20.	Dr. W. Selvamurthy	-	CCR&D (LS & HR)
21.	Shri S.C. Narang	-	CCR&D (R)
22.	Shri Sunil Verma	-	Addl. FA & JS
23.	Shri R.K. Chauhan	-	Dir P&C
24.	Shri B.K. Anand	-	Dir BF&A
25.	Smt. Vijayalakshmy K.Gupta	-	Adl. FA(V)
26.	Shri A.K. Chopra	-	Addl. FA(A)
27.	Ms. Dipali Khanna	-	Addl. FA(K)
28.	Shri G.S. Sood	-	Dir (Fin/Budget)
29.	Shri Sudhir Nath	-	JS(HAL)
30.	Shri R.P. Singh	-	JS(OF)
31.	Shri Alok Perti	-	JS(S)
32.	Shri P.K. Misra	-	Chairman OFB
33.	Shri Fakruddin	-	Dir (CP & M) HAL
34.	Shri A.K. Upadhyay	-	JS(ESW)
35.	Maj. Gen. Kunal Mukherjee	-	ADG WE
36.	Maj. Gen. S.B.S. Bains	-	ADG FP
37.	Air Mshl. J.S. Gujral	-	VM, VSM – DCAS
38.	AVM K.K. Nohwar	-	VM – ACAS (Plans)
39.	AVM N. Vijayakumar	-	VSM – ACAS (Fin Plg)
40.	R Adm. Nirmal Verma	-	ACNS (P&P)
41.	Cmde. A.R. Radhakrishnan	-	PDNP



2. At the outset, the Chairman welcomed the Members to the sitting of the Committee and informed the Members that the representatives of the Ministry of Defence would make a detailed presentation on the subject. 'Defence Preparedness' and further would tender oral evidence on Demands for Grants of the Ministry for the year 2005-2006.
3. The Chairman then welcomed the Defence Secretary and his colleagues to the sitting of the Committee and invited their attention to Directions 55 and 58 of the Directions by the Speaker, Lok Sabha regarding maintaining confidentiality of the deliberations at the sitting.
4. Thereafter, the Committee heard the presentation of the representatives of Ministry of Defence on 'Defence Preparedness'. Then, they sought clarifications on various points arising out of the Demands for Grants (2005-06) of the Ministry of Defence and also on the written replies furnished by the Ministry to the list of points on certain issues, the Ministry assured to furnish written replies.
5. The evidence was not concluded.
6. A verbatim record of the proceedings was kept.
7. The Committee decided to continue evidence of the representatives of the Ministry of Defence on the Demands for Grants (2005-06) of the Ministry of Defence on 22 March, 2005

***The Committee then adjourned.***

**MINUTES OF THE TWENTY FIRST SITTING OF THE STANDING COMMITTEE ON DEFENCE (2005-06)**

The Committee sat on Tuesday, the 22 March, 2005 at 1730 hrs to 1800 hrs in Committee Room No. 139, Parliament House Annexe, New Delhi.

**PRESENT**

Shri Balasaheb Vikhe Patil - Chairman

**MEMBERS****LOK SABHA**

2. Shri Suresh Kalmadi
3. Shri Mahadeorao Shivankar
4. Shri. Dharmendra Yadav

**RAJYA SABHA**

5. Gen.(Retd.) Shankar Roy Chowdhury
6. Smt. N.P. Durga
7. Shri Anand Sharma

**SECRETARIAT**

1. Shri. P.D.T. Achary - Secretary
2. Shri P.K. Bhandari - Director
3. Smt.Anita Jain - Deputy Secretary
4. Shri D.R.Shekhar - Under Secretary

**LIST OF WITNESSES OF MINISTRY OF DEFENCE**

1.	Shri Ajai Vikram Singh	-	Defence Secretary
2.	Ms. Somi Tandon	-	Secretary (Defence Finance)
3.	Shri M. Natrajan	-	SA to RM
4.	Shri Shekhar Dutt	-	Secretary (DP)
5.	Shri H.C. Gupta	-	Special Secretary (Acquisition)
6.	Shri Ranjit Issar	-	Additional Secretary (I)
7.	Shri S. Banerjee	-	AS(DP)
8.	Dr. (Smt.) Rekha Bhargava-	-	Addl. Secy (B)
9.	Ms. Sheela Bhide	-	FA(Acquisition)
10.	Shri Bimal Julka	-	JS(G/Air)
11.	Shri Gautam Chatterjee	-	JS(O/N)
12.	Shri S.K.Sharma	-	JS & AM (Air)
13.	Dr. Thomas Mathew	-	JS & AM (MS)
14.	Dr. A. Sivathanu Pillai	-	CCR&D (NS ACE) & DS
15.	Shri Sunil Verma	-	Addl. FA & JS
16.	Shri R.K. Chauhan	-	Dir P&C
17.	Smt. Vijayalakshmy K.Gupta-	-	Adl. FA(V)
18.	Shri A.K. Chopra	-	Addl. FA (A)
19.	Shri G.S. Sood	-	Dir (Fin/Budget)
20.	Shri Sudhir Nath	-	JS(HAL)
21.	Ms.Rita Menon	-	JS(HAL)
22.	Shri Alok Perti	-	JS (S)
23.	Shri A.K. Upadhyay	-	JS(ESW)
24.	Shri Fakruddin	-	Dir (CP & M) HAL
25.	Shri Ajai Tirkey	-	Dir (Air-I)
26.	Air Mshl. J.S. Gujral	-	VM, VSM-DCAS
27.	Air Mshl. P.S. Aluwalia	-	IG (Inspection & Safety)
28.	AVM K.K. Nohwar	-	VM – ACAS (Plans)
29.	AVM J.S. Apte	-	AVSM- ACAS (Eng A)
30.	AVM S.C. Mukul	-	VM, VSM-ACAS (Ops)
31.	AVM R.K. Mohan	-	ACAS (Logistics)
32.	Air Cmde Arvind Mohanti	-	PDMA
33.	Air Cmde J.A. Sathe	-	Principal Dir (PP & R)
34.	Air Cmde Biswas	-	PD Trg
35.	Air Cmde G.R. Prasad	-	VSM-PDAFW
36.	Gp. Capt. Vinay Kaushal	-	Dir Fin P (CA)
37.	Gp. Capt. Vinay Kaushal	-	Dir Fin P(CA)
38.	Vice Admiral Suresh Mehta-	-	PVSM, AVSM – DCNS
39.	R Adm. Nirmal Verma	-	ACNS (P&P)
40.	Rear Adm. RM. Kshetrapal-	-	TM(M&S)
41.	Cmde A.R. RadhaKrishnan-	-	PDNP

2. At the outset the Chairman welcomed the Members to the sitting of the Committee. The Committee then resumed the evidence of the representatives of the Ministry of Defence on Demands for Grants (2005-06) of the Ministry of Defence.
3. The representatives of the Ministry made a presentation to the Committee about the budgetary requirements/proposals and constraints being faced by the Indian Navy in implementation of their ongoing projects.
4. The evidence was not concluded.
5. The Committee decided to continue evidence of the representatives of the Ministry of Defence on Demands for Grants (2005-06) of the Ministry of Defence on 24 March, 2005.

***The Committee then adjourned.***

**MINUTES OF THE TWENTY SECOND SITTING OF THE STANDING COMMITTEE ON DEFENCE (2005-06)**

The Committee sat on Thursday, the 24 March, 2005 at 1330 hrs to 16.45 hrs in Room No. 'C', Parliament House Annexe, New Delhi.

**PRESENT**

Shri Balasaheb Vikhe Patil- Chairman

**MEMBERS**

**LOK SABHA**

2. Shri A.V. Bellarmin
3. Shri Thupstan Chhewang
4. Shri Suresh Kalmadi
5. Shri Raghuraj Singh Shakya
6. Shri Manvendra Singh
7. Shri Balashowry Vallabhaneni
8. Shri Dharmendra Yadav

**RAJYA SABHA**

9. Shri R.K. Anand
10. Dr. Farooq Abdullah
11. Gen.(Retd.) Shankar Roy Chowdhury
12. Smt. N.P.Durga
13. Shri Janardan Dwivedi
14. Shri Anand Sharma
15. Shri Lalit Suri

**SECRETARIAT**

- |    |                     |   |                  |
|----|---------------------|---|------------------|
| 1. | Shri. P.D.T. Achary | - | Secretary        |
| 2. | Shri P.K. Bhandari  | - | Director         |
| 3. | Smt.Anita Jain      | - | Deputy Secretary |
| 4. | Shri D.R.Shekhar    | - | Under Secretary  |

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**LIST OF WITNESSES OF MINISTRY OF DEFENCE**

1.	Shri Ajai Vikram Singh	-	Defence Secretary
2.	Shri Somi Tandon	-	Secretary (Defence Finance)
3.	Shri M. Natrajan	-	SA to RM
4.	Shri Shekhar Dutt	-	Secretary (DP)
5.	Shri H.C. Gupta	-	Special Secretary (Acquisition)
6.	Shri Ranjit Issar	-	Additional Secretary (I)
7.	Shri S. Benerjee	-	AS (DP)
8.	Dr. (Smt) Rekha Bhargava	-	Addl. Secy (B)
9.	Ms. Sheela Bhide	-	FA(Acquisition)
10.	Shri Bimal Julka	-	JS(G/Air)
11.	Shri Gautam Chatterjee	-	JS(O/N)
12.	Shri S.K. Sharma	-	JS & AM(Air)
13.	Rear Adm. R.M. Kshetrapal	-	TM (M & S)
14.	Shri K.V.S.S. Prasad Rao	-	CCR & D (TMS) & DS
15.	Shri S.C. Narang	-	CCR&D (R)
16.	Shri Sunil Verma	-	Addl., FA & JS
17.	Smt. Vijayalakshmy K.Gupta	-	Adl. FA(V)
18.	Shri A.K. Chopra	-	Addl. FA(A)
19.	Shri Mukesh Kumar Sinha	-	DFA (Budget)
20.	Shri Ashok K. Baweja	-	Chairman, HAL
21.	Shri Sudhir Nath	-	JS(HAL)
22.	Ms. Rita Menon	-	JS(SY)
23.	Shri Alok Perti	-	JS(S)
24.	Shri G.S. Sood,	-	Dir (Bud/Fin)

**Air HQtrs**

25.	Air Mshl. J.S. Gujral	-	VM, VSM – DCAS
26.	Air Mshl. P.S. Ahluwalia	-	DG (Inspection & Safety)
27.	AVM K.K.Nohwar	-	VM-ACAS (Plans)
28.	AVM K.D. Singh	-	AVSM – ACAS (PO)
29.	AVM R.K. Mohan,	-	VSM –ACAS (Lgs)
30.	AVM Suresh Chand Mukul	-	VM, VSM –ACAS (Ops.)
31.	AVM J.S. Apte	-	AVSM-ACAS (Eng A)
32.	Air Cmde A. Mohanty	-	VSM PDMA
33.	Gp. Capt. Vinay Kaushal	-	Dir (Fin. Plg)

**Naval HQtrs**

34.	Vice Admiral Suresh Mehta	-	PVSM, AVSM – DCNS
35.	R Adm. Nirmal Verma	-	ACNS (P&P)
36.	Cmde A.R. RadhaKrishnan	-	PDNP
37.	Cdr. D. Chakraborty	-	JD (NP)

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2. The Committee resumed the evidence of the representatives of the Ministry of Defence on Demands for Grants (2005-06) of the Ministry of Defence.
3. At the behest of the Committee, the representatives again presented the brief profile of the budgetary proposals/projects of the Navy. Thereafter, they replied to the queries raised by the Members in detail.
4. The Committee then heard the presentation of the representatives of the Ministry on Air Force. Meanwhile, the Chairman in view of his pressing preoccupation elsewhere, desired that Shri Suresh Kalmadi, MP may Chair the remaining session of the sitting in his absence. Accordingly, the Committee, under Rule 258 (3) of the Rules & Procedure and Conduct of Business in Lok Sabha chose Shri Kalmadi to act as the Chairman of the sitting.
5. Further, the Committee sought clarifications from the representatives on various points arising out of Demands for Grants (2005-06) of Indian Air Force and also on the written replies furnished by the Ministry to the List of Points on certain issues, the Ministry assured to furnish written replies.
6. The evidence was not concluded.
7. A verbatim record of the proceedings was kept.
8. The Committee decided to continue evidence of the representatives of the Ministry of Defence on the Demands for Grants (2005-06) of their Ministry on 2 April, 2005.

***The Committee then adjourned.***

**MINUTES OF THE TWENTY THIRD SITTING OF THE STANDING COMMITTEE ON DEFENCE (2005-06)**

The Committee sat on Saturday, the 2 April, 2005 at 11.00 hrs to 1430 hrs in Committee Room No. 53, Parliament House Annexe, New Delhi.

**PRESENT**

Shri Balasaheb Vikhe Patil- Chairman

**MEMBERS****LOK SABHA**

2. Shri Churchill Alemao
3. Shri A.V. Bellarmin
4. Shri Suresh Chandel
5. Shri Thupstan Chhewang
6. Smt. Sangeeta Kumari Singh Deo
7. Shri Suresh Kalmadi
8. Dr. K.S.Manoj
9. Shri Raghuraj Singh Shakya
10. Shri Balashowry Vallabhaneni

**RAJYA SABHA**

11. Shri R.K. Anand
12. Gen.(Retd.) Shankar Roy Chowdhury
13. Smt. N.P.Durga
14. Shri Janardan Dwivedi
15. Shri Pramod Mahajan
16. Shri Anand Sharma
17. Shri Lalit Suri

**SECRETARIAT**

1. Shri P.K. Bhandari - Director
2. Smt.Anita Jain - Deputy Secretary
3. Shri D.R.Shekhar - Under Secretary



## LIST OF WITNESSES OF MINISTRY OF DEFENCE

1. Shri Ajai Vikram Singh, Defence Secretary
2. Shri Somi Tandon, Secretary (Defence Finance)
3. Shri M. Natrajan, SA to RM
4. Shri Shekhar Dutt, Secretary (DP)
5. Shri H.C. Gupta, Special Secretary (Acquisition)
6. Shri Ranjit Issar, Additional Secretary (I)
7. Shri S. Benerjee, AS (DP)
8. Dr. (Smt) Rekha Bhargava, Addl. Secy (B)
9. Ms. Sheela Bhide, FA(Acquisition)
10. Shri K.U. Limaye, CCR & D (ECS)
11. Shri S.C. Narang, CCR & D (R )
12. Shri R.K. Chauhan, Dir P & C
13. Shri B.K. Anand, Dir BF & A
14. Shri P.K. Misra, Chairman OFB
15. Shri P.K. Anand, JS & AM(LS)
16. Shri S.K. Sharma, JS & AM(Air)
17. Shri Bimal Julka, JS(G/Air)
18. Shri Ranjan Chatterjee, JS(E)
19. Shri Gautam Chatterjee, JS (O/N)
20. Shri A.K. Upadhyay, JS (ESW)
21. Shri Ashok K. Baweja, Chairman, HAL
22. Shri Sudhir Nath, JS (HAL)
23. Ms.Rita Menon, JS (SY)
24. Shri Sunil Verma, Addl. FA & JS
25. Shri A.K. Chopra, Addl. FA(A)
26. Shri S.N. Misra, Addl. FA & JS
27. Shri G.S. Sood, Dir (Fin & Budget)
28. Shri K.G. Gupta, DDG/Coord. of Cell
29. Shri. P.K. Rastogi, JS (Trg) & CAO

### **Army HQtrs**

30. Lt. Gen. PPS Bhandari, PVSM, AVSM – DCOAS (P&S)
31. Lt. Gen. V.K. Chopra, VSM & Bar – MGO
32. Lt. Gen.J.R. Bhardwaj, DGAFMS
33. Maj. Gen. Kunal Mukherjee, ADG WE
34. Maj. Gen. Vikram Madan, ADG EM
35. Maj. Gen. J.S.Lidder, ADG MO (A)
36. Maj. Gen. R.P.S. Malhan, ADG SD
37. Maj. Gen. Samanta, ADG MPS
38. Maj. Gen. S.B.S. Bains, ADG FP
39. Brig. B.V. Nair, DDG SD

**Naval HQtrs**

40. Vice Admiral Suresh Mehta, DCNS
41. V Adm. Raman Puri, CISC
42. R Adm. Nirmal Verma, ACNS (P&P)

**Air Force HQtrs**

43. Air Mshl. J.S. Gujral, VM, VSM – DCAS
43. Air Mshl. P.S. Ahluwalia, DG (Inspection & Safety)
44. AVM K.K.Nohwar, VM-ACAS (Plans)

2. At the outset, the Chairman welcomed the Members to the sitting of the Committee. The Committee, then resumed the evidence of the representatives of the Ministry of Defence on Demands for Grants (2005-06) of the Ministry of Defence.

3. Further, the representatives of Ministry of Defence, as desired by the Chairman, made presentation on the budgetary proposals/projects of Air Force. Thereafter, the representatives answered various queries raised by the Members on Demands for Grants of Indian Air Force for the year 2005-06.

4. The Committee, then, heard the presentation of the representatives of Ministry of Defence on the budgetary proposals/projects of Indian Army and sought clarifications on certain issues pertaining to the Demands for Grants of Indian Army and also on the written replies furnished by the Ministry to the List of Points. On some of the policy matters which could not be replied to, the Ministry has assured to furnish written replies.

5. The evidence was concluded.

*The witnesses then withdrew.*

6. Later, the Committee decided to take the oral evidence of the defence experts and hear their views/suggestions on the budgetary demands pertaining to Defence Budget on 7 April, 2005.

***The Committee then adjourned.***

## **MINUTES OF THE TWENTY FOURTH SITTING OF THE STANDING COMMITTEE ON DEFENCE (2005-06)**

The Committee sat on Thursday, the 7 April, 2005 at 1500 hrs to 1700 hrs in Committee Room No. G-074, Parliament Library Building, New Delhi.

### **PRESENT**

Shri Balasaheb Vikhe Patil - Chairman

### **MEMBERS**

#### **LOK SABHA**

2. Shri liiyas Azmi
3. Shri A.V. Bellarmin
4. Shri Suresh Chandel
5. Shri Thupstan Chhewang
6. Shri Milind Deora
7. Dr. C. Krishnan
8. Shri S.D. Mandlik
9. Dr. K.S.Manoj
10. Shri Raghuraj Singh Shakya
11. Shri Mahadeorao Shivankar
12. Shri Ganesh Prasad Singh
13. Shri Manvendra Singh
14. Shri Balashowry Vallabhaneni

#### **RAJYA SABHA**

15. Shri R.K. Anand
16. Gen.(Retd.) Shankar Roy Chowdhury
17. Smt. N.P.Durga
18. Shri Janardan Dwivedi
19. Shri Anand Sharma

### **SECRETARIAT**

1. Shri P.D.T. Achary - Secretary
2. Smt.Anita Jain - Deputy Secretary
3. Shri D.R.Shekhar - Under Secretary

**Non-Official Witnesses**

1. Dr. K. Subramanian - At 1500 Hrs.
2. Air Marshal D. Keelor (Retd.) - At 1600 Hrs.

2. At the outset, the Chairman welcomed the Members to the sitting of the Committee and informed that Defence Experts -- Dr. K. Subramanian and Air Marshal D. Keelor (Retd.) will depose before the Committee on the budgetary demands of the Defence Budget.

3. Then, the Chairman welcomed Dr. Subramanian to the sitting of the Committee and invited his attention to Directions 55 and 58 of the Directions by the Speaker, Lok Sabha regarding maintaining confidentiality of the deliberations at the sitting.

4. Further, the Committee heard the presentation of Dr. Subramanian on Defence preparedness, planning and the budgetary demands of the Ministry of Defence. The Committee also sought certain clarifications from him on policy and operational issues pertaining to the Defence Budget and the financial requirements of our defence services for the year 2005-06.

5. The evidence was concluded.

*The witness then withdrew.*

6. Later, the Chairman, welcomed Air Marshal D. Keelor (Retd.) to the sitting of the Committee and invited his attention to Directions 55 and 58 of the Directions by the Speaker, Lok Sabha regarding maintaining confidentiality of the deliberations at the sitting.

7. Thereafter, Air Marshal Keelor (Retd.) tendered his suggestions on various issues pertaining to the budgetary demands of the Ministry of Defence in particular reference to existing and future requirements of Indian Air Force.

8. The evidence was concluded.

*The witness then withdrew.*

***The Committee then adjourned.***

**MINUTES OF THE TWENTY SIXTH SITTING OF THE STANDING COMMITTEE ON DEFENCE (2005-06)**

The Committee sat on Wednesday, the 13 April, 2005 at 1100 hrs to 13.30 hrs in Committee Room No '53' , Parliament House, New Delhi.

**PRESENT**

Shri Balasaheb Vikhe Patil - Chairman

**MEMBERS****LOK SABHA**

2. Shri Churchill Alemao
3. Shri Iiyas Azmi
4. Shri Suresh Chandel
5. Shri Thupstan Chhewang
6. Shri Mahadeorao Shivankar
7. Shri Ganesh Prasad Singh
8. Shri Manvendra Singh

**RAJYA SABHA**

9. Shri R.K. Anand
10. Shri Janardan Dwivedi
11. Shri Pramod Mahajan
12. Shri Anand Sharma

**SECRETARIAT**

1. Shri P.D.T. Achary - Secretary
2. Shri M. Rajagopalan Nair - Additional Secretary
3. Shri P.K. Bhandari - Director
4. Smt.Anita Jain - Deputy Secretary
5. Shri D.R.Shekhar - Under Secretary

2. At the outset, the Chairman welcomed the Members to the sitting of the Committee and informed that the Committee would take up the Draft Report on Demands for Grants of the Ministry of Defence for the year 2005-06 for consideration and adoption during the sitting.
3. The Committee, thereafter, took the draft Report for consideration. The Members then offered their suggestions on the chapters of the draft Report pertaining to General Defence Budget, Defence Planning, Chief of Defence Staff and Modernisation of Indian Army.
4. The Committee after discussion suggested some modifications/changes on the draft recommendations on Delivery of Justice under Military Law, Ordnance Factories, Indigenisation of Navy, Inventory Management of Air Force and DRDO etc.
5. The Committee then adopted the draft Report with amendments.
6. The Committee further authorized the Chairman to finalize the Report in the light of discussion held and factual correction if any, suggested by the Ministry and to present the Report to both the Houses of Parliament.

***The Committee then adjourned.***

