

**STANDING COMMITTEE ON DEFENCE
(2020-21)**

(SEVENTEENTH LOK SABHA)

MINISTRY OF DEFENCE

[Action taken by the Government on the Observations / Recommendations contained in the First Report (Seventeenth Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2019-20 on 'General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Canteen Stores Department, Welfare of Ex-Servicemen, Ex-Servicemen Contributory Health Scheme, Defence Pensions, Sainik Schools (Demand Nos. 18 and 21)']

ELEVENTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

February, 2021/ Magha, 1942 (Saka)

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Presented to Lok Sabha on 12.2.2021

Laid in Rajya Sabha on 12.2.2021



**LOK SABHA SECRETARIAT
NEW DELHI**

February, 2021/ Magha, 1942 (Saka)

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**COMPOSITION OF THE STANDING COMMITTEE ON DEFENCE
(2020-21)**

Shri Jual Oram (BJP)

-

Chairperson

Lok Sabha

2. Shri Deepak (Dev) Adhikari
3. Kunwar Danish Ali
4. Shri Ajay Bhatt
5. Shri Devusinh Jesingbhai Chauhan
6. Shri Nitesh Ganga Deb
7. Shri Rahul Gandhi
8. Shri Annasaheb Shankar Jolle
9. Choudhary Mehboob Ali Kaiser
10. Prof. (Dr.) Ram Shankar Katheria
11. Smt. (Dr.) Rajashree Mallick
12. Dr. T.R. Paarivendhar
13. Shri Kapil Moreshwar Patil
14. Shri Anumula Revanth Reddy
15. Shri Jugal Kishore Sharma
16. Dr. Shrikant Eknath Shinde
17. Shri Prathap Simha
18. Shri Brijendra Singh
19. Shri Mahabali Singh
20. Shri Kotagiri Sridhar
21. Shri Durga Das Uikey

Rajya Sabha

22. Dr. Ashok Bajpai
23. Shri Prem Chand Gupta
24. Shri Sharad Pawar
25. Shri V. Lakshmikantha Rao
26. Shri Sanjay Raut
27. Shri Rajeev Satav
28. Dr. Abhishek Manu Singhvi
29. Shri Kamakhya Prasad Tasa
30. Dr. Sudhanshu Trivedi
31. Lt. Gen. Dr. D. P. Vats (Retd.)

SECRETARIAT

1. Smt. Kalpana Sharma - Additional Secretary
2. Dr. Sanjeev Sharma - Director
3. Smt. Preeti Negi - Assistant Committee Officer

INTRODUCTION

I, the Chairperson of the Standing Committee on Defence (2020-21), having been authorized by the Committee, present this Eleventh Report of the Committee on Action Taken by the Government on the Observations/Recommendations contained in the First Report (Seventeenth Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2019-20 on 'General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Canteen Stores Department, Welfare of Ex-Servicemen, Ex-Servicemen Contributory Health Scheme, Defence Pensions, Sainik Schools (Demand Nos. 18 and 21)'.

2. The First Report was laid in Rajya Sabha on 13.12.19, presented to Hon'ble Speaker, Lok Sabha on 20.12.19 and presented to Lok Sabha on 31.1.20. The Report contained 76 Observations/Recommendations. The Ministry of Defence furnished Action Taken Replies on all the Observations/Recommendations in July, 2020.

3. The Report was considered and adopted by the Committee at their Sitting held on 9.2.2021.

4. For facility of reference and convenience, Observations/Recommendations of the Committee have been printed in bold letters in the Report.

5. An analysis of Action taken by the Government on the Observations/Recommendations contained in the First Report (17th Lok Sabha) of the Standing Committee on Defence is given in Appendix II.

New Delhi;
9 February, 2021
20 Magha, 1942 (Saka)

Jual Oram
Chairperson
Standing Committee on Defence

REPORT

CHAPTER I

This report of the Standing Committee on Defence deals with Action Taken by the Government on the Observations/Recommendations contained in the First Report of Standing Committee on Defence (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2019-20 on 'General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Canteen Stores Department, Welfare of Ex-Servicemen, Ex-Servicemen Contributory Health Scheme, Defence Pensions, Sainik Schools (Demand Nos. 18 and 21)' which was laid in Rajya Sabha on 13.12.19, presented to Hon'ble Speaker, Lok Sabha on 20.12.19 and presented to Lok Sabha on 31.1.20.

2. The Committee's First Report (17th Lok Sabha) contained 76 Observations/Recommendations on the following aspects: -

Para No.	Subject
1	Ministry of Defence Budget and Demands for Grants 2019-20: A bird's eye view
2-4	Trends in Ministry of Defence expenditure and compromises made due to reduced allocations
5	Growth of Defence Budget vis-à-vis rate of inflation
6-8	Growth of Defence Budget vis-à-vis Central Government Expenditure and Gross Domestic Product (GDP)
9-11	Projections made by the three Services
12	Chief of Defence Staff (CDS)
13	BORDER ROADS ORGANIZATION (BRO)
14-16	Budgetary Allocation to BRO
17	Required and existing number of equipment with BRO
18-20	Construction of Roads by BRO
21-24	Delay in execution of Projects and difficulties in maintenance of roads
25	Construction of underwater tunnel
26	Shortage of manpower
27-28	INDIAN COAST GUARD: Requirement of adequate budgetary support
29-30	Required and existing manpower
31	MILITARY ENGINEER SERVICES: Budgetary Provisions and Compromises made or likely to be made
32	Achievement of construction targets by MES
33	DIRECTORATE GENERAL DEFENCE ESTATES: Budgetary provision
34-35	Revenue sources
36	Non-implementation of Central Government Schemes
37-38	Building Bye-laws

39	Ammunition Dumps
40-41	Encroachment of Defence Lands
42	Inconvenience to Civilian population
43-46	Order Book Challenges and Declining trend of production in Defence Public Sector Undertakings (DPSUs)
47-48	Inadequate capacity utilisation and Defence Exports
49	Research and Development by DPSUs
50-51	Time slippages in delivery of products
52	Indigenisation and self-reliance in defence production
53	Welfare Issues
54	CANTEEN STORES DEPARTMENT (CSD): Budgetary Allocations
55-56	Irregularities in CSD
57	Quality of items supplied by CSD
58	Online presence of CSD
59-61	WELFARE OF EX-SERVICEMEN: Resettlement Opportunities
62	EX-SERVICEMEN CONTRIBUTORY HEALTH SCHEME (ECHS): Budgetary provisions
63	Medical bills pending with ECHS
64	New Proposals
65	Issue of specialized doctors under ECHS
66	Expansion of ECHS
67	DEFENCE PENSION: Budgetary Provisions
68	One Rank One Pension (OROP)
69-71	SAINIK SCHOOLS: Budgetary provisions
72	Board of Governors
73	Admission of Girl Students in Sainik Schools
74-76	Intake of Sainik School Students into National Defence Academy (NDA)

3. Action Taken Replies have been received from the Government in respect of all the observations/recommendations contained in the Report. The replies have been examined and categorised as follows:-

(i) (a) Observations/Recommendations which have been accepted by the Government:

Para Nos. 1, 2, 3, 4, 5, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74 and 76

(65 Recommendations)

These are included in Chapter II A of the Report.

(b) Observations/Recommendations which have been accepted by the Government and are commented upon:

Para Nos. 9, 10, 11, 13, 25, 36, 39 and 75

(8 Recommendations)

These are included in Chapter II B of the Report.

- (ii) **Observations/Recommendations which the Committee do not desire to pursue in view of the replies received from the Government:**

Para No. – Nil-

(0 Recommendation)

These are included in Chapter III of the Report.

- (iii) **Observations/Recommendations in respect of which replies of Government have not been accepted by the Committee, which require reiteration and to be commented upon:**

Para Nos. 6, 7 and 8

(3 Recommendations)

These are included in Chapter IV of the Report.

- (iv) **Observations / Recommendations in respect of which Government have furnished interim replies:**

Para nos –Nil-

(0 Recommendation)

These are included in Chapter V of the Report.

- 4. The Committee desire that the Ministry's response to their comments made in Chapter I of this Report and final replies in respect of Observations/ Recommendations contained in Chapter-V of this Report should be furnished to them at the earliest and in any case not later than six months of the presentation of this Report.**

A. GROWTH OF DEFENCE BUDGET VIS-À-VIS CENTRAL GOVERNMENT EXPENDITURE AND GROSS DOMESTIC PRODUCT (GDP)

Recommendation Para Nos. 6, 7 and 8

5. The Committee had recommended as under:
“The Committee can apparently see that the allocation of Defence Budget, including Civil estimates and Pension for 2019-20 is ₹ 4,31,010.79 Crore, which accounts for 15.47 percent of total Central Government Expenditure and 2.04 percent of GDP for the year 2019-20. Further, Capital budget of Ministry of Defence for 2019- 20 is 32 percent of the Capex of Central Government Expenditure. A close scrutiny of the data provided by the Ministry reveals that during 2018-19 (BE), Defence Expenditure, as a percentage of Central Government Expenditure was 16.56 percent. This has declined to a level of 15.47 percent in 2019-20 (BE). Defence Expenditure, as a percentage of GDP, which was to the extent of

2.72 percent in the year 2015-16 has also been steadily declining to the level of 2.04 percent in 2019-20 (BE).

A comparison of data provided by the Ministry, based on the Stockholm International Peace Research Institute (SIPRI) Military Expenditure Database indicates that in 2018, 5.5 percent of the Chinese Government Expenditure has been on Defence. During the same year, Defence expenditure, as a percentage of the Government expenditure has been to the extent of 18.5 percent in case of Pakistan, 9.0 percent for USA, 11.4 percent for Russia and 4.6 percent for UK. Also, during 2018, Defence Expenditure as a percentage of GDP was 1.9 percent in case of China, 4.0 percent in case of Pakistan, 3.2 percent in the case of USA, 3.9 percent for Russia and 1.8 percent in the case of UK. In the 40th Report of Standing Committee on Defence (16th Lok Sabha), the Committee had recommended for having a benchmark percentage of GDP earmarked for deciding on the allocation to the Defence Sector. However, the Ministry of Defence is of the opinion that it may not be always appropriate to link Defence spending in terms of national economic output. The reason adduced by the Ministry is that if the economy grows at a faster rate, spending decreases as a percentage of GDP but it doesn't mean that the level of spending has fallen or has even become inadequate. Looking at the spending as a percentage of GDP thus creates an illusion of declined spending by ignoring the size of economy. It has been further submitted that this question was also examined in detail by the Kargil Review Committee which did not recommend a specific, targeted percentage of GDP to be earmarked for Defence. It exhorted the need to extract the maximum value from each defence rupee, inter-alia, through rigorous prioritisation, restructuring of the defence forces, integration with defence production and focusing resources in areas likely to enhance the effectiveness of the defence forces.

The intention of the Committee in recommending for having a benchmark percentage of GDP earmarked for deciding on the allocation to the Defence Sector is to ensure that the plans for modernisation and upgradation of our forces do not suffer from lack of budget. The Committee fail to understand that with Defence Expenditure being 15.47 percent in 2019-20(BE) as a percentage of Central Government Expenditure, compared to 16.56 percent to that in 2018-19 (BE), how the Ministry is going to cater to the requirements of capital acquisition and burgeoning salary and pension bills. Therefore, the Committee recommend that the Ministry of Defence should vigorously pursue its case for adequate allocation at RE stage and also a fixed percentage of GDP from the next budget".

6. The Ministry in its action taken reply has stated as under:-

"In RE 2019-20, Rs. 4,48,820.10 Crore has been allocated under Defence Budget (including Miscellaneous and Pensions) by M/o Finance which is an increase of Rs. 17,809.31 Crore over BE 2019-20. The total Defence Budget is 16.63% of total Central Government Expenditure and 2.20% of GDP (RE 2019-20). Also, Capital Budget of Ministry of Defence in RE 2019-20 is approximately 33.07% of the total Central Government Capital Expenditure. Data on growth of Defence Budget in comparison to central government expenditure and GDP, in absolute and relative terms, for the last four years and current financial year is given below:

(Rs. in crore)

Year	Defence Expenditure	Total CGE (Actuals)	Def. Exp % of CGE	GDP	Def. Exp % of GDP
2015-16 (Actual)	2,93,919	17,90,783	16.41	1,37,71,874	2.13
2016-17 (Actual)	3,51,650	19,75,194	17.80	153,62,386 (2nd RE)	2.29
2017-18 (Actual)	3,79,702	21,41,973	17.73	170,95,005 (1st RE)	2.22
2018-19 (Actual)	4,03,457	23,15,113	17.43	1,90,10,164 (PE)	2.12
2019-20(RE)	4,48,820	26,98,552	16.63	2,04,42,233 (RE)	2.20

Note: GDP figures from FY 2015-16 to 2018-19 are as per Economic Survey 2019-20.

(Vol-2) – Table 1.6-Components of GDP at Current Prices

GDP figure for 2019-20 (RE) is as per Budget at a Glance (2020-21)

BE= Budget Estimates, RE=Revised Estimates, PE = Provisional Estimates

It may be seen from the above table that although the Defence Budget as a percentage of GDP and central government expenditure is indicating fluctuating trends, however, it may be appreciated that it has been consistently increasing in absolute terms.

The matter of keeping certain percentage of GDP for Defence budget was taken up with Ministry of Finance in 2017. In their reply Ministry of Finance had, *inter-alia*, stated that allocations to Ministries/Departments are made largely on the basis of resource position of the government. Since Government resources come with definite cost, resource allocation is made among various competing priorities. Thus, Defence expenditure as definite percentage of total Government Expenditure/GDP cannot be ensured considering the fact the resource allocation are made on need basis.”

7. The Committee in their recommendation contained in the First Report (Seventeenth Lok Sabha) had recommended that the Ministry of Defence should vigorously pursue its case for adequate allocation at Revised Estimates stage and also a fixed percentage of Gross Domestic Product (GDP) from the next budget. In this connection, the Ministry of Defence has provided data since the year 2015-16 onwards on growth of Defence Budget in comparison to Central Government Expenditure, GDP and submitted that the Defence Budget as a percentage of GDP and Central Government Expenditure is indicating fluctuating trends, however, it may be appreciated that it has been consistently increasing in absolute terms. Further, the matter of keeping certain percentage of GDP for Defence budget was taken up with Ministry of Finance in 2017. In their reply, the Ministry of Finance had, *inter alia*, stated that allocations to Ministries/Departments are made largely on the basis of resource position of the government. Since Government resources come with definite cost, resource allocation is made among various competing priorities. Thus, Defence expenditure

as definite percentage of total Government Expenditure/GDP cannot be ensured considering the fact the resource allocation are made on need basis. The Committee are of firm opinion that national security is topmost priority and adequate resource allocation is necessary for modernisation of the Forces. Therefore, the Committee recommend that even if a fixed percentage of Defence Expenditure, as part of total Central government Expenditure or Gross Domestic Product, cannot be ensured in every budget, the projected demands of the Services should invariably be met for ensuring optimum operational preparedness. It would not be out of place to mention here that, if required, regular meetings may be held with the Ministry of Finance to take the issues to logical conclusion.

B. PROJECTIONS MADE BY THE THREE SERVICES

Recommendation Para Nos. 9, 10 and 11

8. The Committee had recommended as under:
“The Committee deduce from the data supplied to them that the figures of allocations to the Services are much lower than what they had projected at both Budget Estimates (BE) and Revised Estimates (RE) stage. Moreover, the Services have been mostly able to spend the amounts allocated at the stage of RE. For the previous financial year i.e. 2018-19, at the stage of BE, the Army projected a requirement of Rs. 1,96,387.36 crore for both Revenue and Capital expenditure, but was given only Rs. 1,53,875.22 crore. At the Revised Estimates stage of that year, the Army projected an amount of Rs. 1,83,071.32 crore but was allocated only Rs. 1,56,628.05 crore. In 2018-19, the Army spent 103.2 percent of the budget provided i.e. Rs. 1,61,680.04 crore. In the case of Navy, the projected amount was Rs. 59,443.16 crore for both Revenue and Capital. However, only Rs. 40,419.53 crore were provided at BE Stage. At the Revised Estimates stage of the year, the Navy projected an amount of Rs. 55,156.23 crore but was allocated only Rs. 41,685.91 crore. Of this, the Navy spent 101.63 percent of the budget provided i.e. Rs. 42,365.83 crore. Similarly, while the Air Force projected a requirement of Rs. 1,12,955.53 crore, quite surprisingly, only Rs. 64,591.44 crore was allocated at BE stage. At the stage of Revised Estimates of the year, the Air Force projected an amount of Rs. 1,00,986.83 crore but was allocated only Rs. 63,875.60 crore. of this, the Air Force was able to spend more than 101.35 percent of the budget provided i.e. Rs. 64,742.99 crore. The Committee are satisfied to note that the Forces have been able to completely utilize the budgetary allocation.

Further, the Committee find that for the Budget Estimates 2019-20, the Army projected an amount of Rs. 1,57,896.23 crore under the Revenue Head, but has been allocated only Rs. 1,40,398.49 crore. Under the Capital Head, the projected amount is Rs. 44,690.98 crore but only Rs. 29,511.25 crore has been allocated, which amounts to 66 percent of the projected requirement. Again, for the current year 2019-20, while the Navy projected a requirement of Rs. 27,086.29 crore, the allocated amount has been Rs. 22,211.71 crore under the Revenue Head. Under the Capital Head, while the Navy projected an amount of Rs. 37,220.98 crore, the allocated amount is only Rs. 23,156.43 crore, which amounts to approximately 62 percent of the projected requirement. While an amount of Rs. 34,849.50 crore has been

projected as the requirement under the Revenue Head by Air Force, Rs. 29,601.69 crore has been provided. Under the Capital Head, while the Air Force projected a requirement of Rs.74,894.56 crore, the allocation has been only Rs. 39,347.19 crore.

The Ministry of Defence in their written submissions to the Committee stated that the requirements projected by Services are proposed to the Ministry of Finance for favourable consideration. While allocating funds, the Ministry of Finance analyses past absorption capacity of the Services and the pace of expenditure in the current Financial Year. The Committee understand that if this logic is applied, there is no reason with the Ministry of Finance not to allocate requisite budget for the Forces as for the past few financial years they have been able to fully utilize the funds allocated to them at Revised Estimates stage. Moreover, while projecting their demands to the Ministry of Finance, the Services must have taken into account their capital and revenue expenditure to be met this year. Therefore, the Committee recommend that at least now the Ministry of Defence, citing healthy trend of utilization of funds and critical requirements of operational preparedness of the Forces, should strongly press for additional allocation of funds to the Ministry of Finance at Revised Estimates stage.”

9. The Ministry in its action taken reply has stated as under:-

“In RE 2019-20, an amount of Rs. 4,12,088.42 crore i.e. additional amount of Rs.1,06,792.35 crore over BE 2019-20, was projected to Ministry of Finance under Defence Services Estimates (DSE). However, an amount of, Rs. 3,16,296.07 Crore has been allocated under DSE by M/o Finance which is an increase of Rs. 11,000 Crore over BE 2019-20 allocations. This increase comprises of Rs. 4000 Crore under Revenue Head and Rs. 7000 Crore under Capital Head.

The recommendation of the Committee has been noted and it is assured that projections / requirements of the Services will be forwarded to Ministry of Finance for favourable consideration. Further, the available resources will be optimally utilized based on prioritized requirements of the Services and all efforts will be made to ensure that critical requirements of Services are duly addressed.”

10. The Committee learn that in Revised Estimates 2019-20, an amount of Rs. 4,12,088.42 crore i.e. additional amount of Rs.1,06,792.35 crore over Budget Estimates 2019-20, was projected to Ministry of Finance under Defence Services Estimates (DSE). However, an amount of, Rs. 3,16,296.07 crore has been allocated under Defence Services Estimates by the Ministry of Finance, which is an increase of Rs. 11,000 crore over Budget Estimates 2019-20 allocations. This increase comprises of Rs. 4000 Crore under Revenue Head and Rs. 7000 Crore under Capital Head. Though the Ministry has submitted that the available resources will be optimally utilized based on prioritized requirements of the Services and all efforts will be made to ensure that critical requirements of Services are duly addressed, the Committee cannot help but observe that in view of mismatch between projected and allocated funds in Revised Estimates 2019-20, some compromises are bound to happen. Therefore, keeping in view the current security challenges and threat perception, they recommend that requisite

financial aid to the Services should at least be extended for projects critical for maintaining operational and war preparedness at all times.

C. BORDER ROADS ORGANISATION

Recommendation No. 13

11. The Committee had recommended as under:
 “The Committee, through post-evidence replies, had sought information on certain points, which are mentioned in the narration part of this Report. The information was particularly sought on handing over of certain projects of Indo-China border roads to BRO; taking of the projects of lower areas, amendments in the Service Rules of BRO; installing of satellite dish for satellite monitoring of projects; plans for providing single-window formation for clearing the issues relating to road construction, possibility of providing imprest funds to BRO and on that of state of roads to be built in India which BRO has already built in friendly foreign countries, etc. The Committee has not received this information. Timely submission of information to the Committee is very important in framing the relevant recommendations as well as their forming a part of the Report. The Committee would like the Ministry to take this issue very seriously and, in future, all the information as sought by the Committee must be sent within the timelines. The points on which information is waited must be sent expeditiously so that they could at least be added in the Report at the time of finalizing of the Action Taken Report.”

12. The Ministry in its action taken reply has stated as under:-

“Noted for compliance. The status on various issues is summarized below:

(i) **Handing over certain road projects:** Based on the operational requirements of the Army and consequent upon the decision taken in the National Security Council meeting, it was decided that BRO may focus on core strategic functions on the borders. Accordingly, certain roads in the hinterland, which were earlier constructed by BRO and are now further required to be improved, were identified to be handed over to other agencies, so that BRO is able to utilize its resources optimally for construction of roads, which are of strategic importance in the border areas and will meet the operational requirements of the Army.

Further, the decisions to hand over the roads to civil agencies are also taken in accordance with the National Highway Development Plan called “Bharatmala”. Subsequently some of the road stretches funded under Bharatmala Pariyojana which were transferred to BRO by MoRT&H are given below:-

Stretch of road	State	Length (km)
Askot-Dharchula-Tawaghat-Sirkha-Malpa-Garbyang-Lipu-Lekh Pass	Uttarakhand	62
Mana-Mussapani-Gasroli-Rattakana-Manapass		63
Joshimath-Malari		62
Bhaironghati-Nelang-Naga-Angar-PDA-Medikay		70
Simli-Gawaldam		47

Mangan–Kudyong-Chugthang-Lachung-Yumthang-Yume- Samdang border	Sikkim	90
Chugthang-Lachen-Monastery-Log bridge-Muguthang		59

The main reasons to hand over these roads stretches to BRO by MoRT&H/NHIDCL are that roads are located in high altitude and snow bound areas where it may not be possible for NHIDCL to take up these roads through EPC mode of execution.

(ii) **Service Rules:** Officers and subordinates of BRO are governed by Central Civil Service (CCS) Rules. In addition to these rules, certain Departmental Rules, which are BRO specific, have been compiled under Border Road Regulations (BRR), which was last revised in 1993 and are further under revision.

(iii) **Satellite dish for satellite monitoring of projects:** GIS based digitization of road infrastructure software for the roads in the border areas to monitor the progress in the Border States is under progress, which is likely to be completed by 2020.

(iv) **Imprest Funds:** The idea to provide imprest funds has not been contemplated.

(v) **Single window clearance:** Single window system has been established at District, State & MoEF level to fast track, processing of forest clearance cases on 09 Jul, 2010.

(vi) **State of roads to be built in India which BRO has already built in friendly foreign countries:** Roads constructed by BRO in Bhutan and India are more or less similar. The roads are constructed by BRO in India as per the specifications stipulated by Indian Road Congress (IRC) codes whereas, the roads in Bhutan are constructed as per the specifications stipulated by Royal Government of Bhutan, Ministry of Works & Human Settlement, Department of Roads.”

13. **The Committee in their original Report had sought information regarding handing over of certain projects of Indo-China Border Roads to Border Roads Organization (BRO). In this regard, the Ministry has submitted that the decisions to hand over the roads to civil agencies were taken in accordance with the National Highway Development Plan called ‘Bharatmala’. Subsequently, some of the road stretches in Uttarakhand and Sikkim funded under Bharatmala Pariyojana were transferred to BRO by the Ministry of Road Transport and Highways (MoRT&H). The main reason to hand over these roads stretches to BRO by MoRT&H/ National Highways and Infrastructure Development Corporation (NHIDCL) is due to the fact that these roads are located in high altitude and snow bound areas where it may not be possible for NHIDCL to take up these roads through EPC (Engineering, Procurement, and Construction) mode of execution. In this regard, the Committee desire to be apprised of the latest status of the maintenance of these roads and whether any additional funds have been allocated to BRO by MoD or MoRT&H for this purpose.**

The Committee note that Officers and subordinates of BRO are governed by Central Civil Service (CCS) Rules. In addition to these rules, certain Departmental Rules, which are

BRO specific, have been compiled under Border Road Regulations (BRR), which were last revised in 1993 and are under revision. In this regard, the Committee recommend that revision of these Departmental rules be expedited keeping in view best interest of BRO as well as Officers and Subordinates within the organization.

D. CONSTRUCTION OF UNDERWATER TUNNEL

Recommendation Para No. 25

14. The Committee had recommended as under:

“The Committee note that for the construction of underwater tunnel in Brahmaputra river, global tendering of Request for Proposal (RFP) for the same has been completed on 15 October, 2019 and the timeline to finish the work is 2028. The Committee are happy to know about this development, nevertheless they recommend that for such crucial works, BRO should adhere to the timelines and complete the work on schedule as envisaged by

them. The role of the Ministry and other stakeholders such as State Government, Ministry of Environment and Forest, etc, is very crucial in accomplishing this project without registering any time and cost escalations. If required, the Ministry may constitute a monitoring committee for regular oversight in this regard under intimation of the Committee. They would also like to be apprised.

The Committee are also of the view that bridges on the rivers in North Eastern Region should be constructed at more than two places, so in case of one bridges is swept away due to natural fury, other option can be exploited. This move will definitely help in reducing the distance for the natives as well as help the forces to reach places in time.”

15. The Ministry in its action taken reply has stated as under:-

“Approval has been accorded to carry out the Feasibility study and Detailed Project Report (DPR) preparation for the underwater tunnel for road & rail connectivity across river Brahmaputra. Feasibility and Detailed Project Report (DPR) is expected to be completed in 24 months.

Regular review of EPC projects which includes the construction of underwater tunnel across Brahmaputra is done under the Chairmanship of JS (BR).”

16. The Committee in their First Report (Seventeenth Lok Sabha) had recommended that bridges on the rivers in North Eastern Region should be constructed at more than two places because in case if one bridge is swept away due to natural fury, other option can be exploited. However, the Ministry’s reply is silent in this regard. Keeping in view the recent incident of collapsing of a bailey bridge in Uttarakhand which cut off the reach to certain strategic areas for some time period, the Committee reiterate their recommendation of

building bridges on the rivers in North Eastern Region at more than two places to ensure unwavering connectivity of the Forces and natives of the difficult terrains.

E. NON-IMPLEMENTATION OF CENTRAL GOVERNMENT SCHEMES

Recommendation Para No. 36

17. The Committee had recommended as under:
“The Committee are disappointed to learn that various central and state Government schemes are not being implemented in the Cantonment areas. The representatives of the Ministry of Defence candidly submitted before the committee that there is no resistance from their side in implementation of these schemes in cantonment areas. However, the State Government do not take into account the Cantonment Boards while formulating or implementing Schemes of Welfare for other municipalities. The Committee understand that under Section 10 of the Cantonment Act 2006, the cantonment Boards were declared as deemed Municipalities in accordance with Article 243 P of the Constitution for the purpose of receiving grants and allocations; or implementing the Central Government schemes of social welfare, public health, hygiene, safety, water supply, sanitation, urban renewal and education. Therefore, in their opinion, there is no reason that Central or State Government sponsored schemes may not be implemented in Cantonment areas. They recommend that the Ministry of Defence should vigorously take up the matter with the state Government concerned so that benefits of such schemes are also extended to the population living in Cantonment areas, especially the Scheduled Castes/Scheduled Tribe/ BPL Beneficiaries, and they do not feel secluded from the rest of the country. Further, a committee may be formed comprising of all stakeholders i.e. representatives of the Ministry of Defence, Local Members of Parliaments and Members of Legislative Assembly, Directorate General Defence Estate (DGDE), Cantonment Boards, State Government authorities etc. to monitor and review this situation and the committee be apprised accordingly.”
18. The Ministry in its action taken reply has stated as under:-
“MoD has taken up the matter with the Chief Secretaries of all concerned State Governments vide letter No. 6(2)/2015-D(Q&C) dated 05.11.2019 to issue suitable instructions to institutionalize implementation of Centrally Sponsored Schemes in Cantonment areas. The Principal Directors, DE, the Commands are also pursuing it with concerned State Governments for inclusion of the Cantonment area/residents in its implementation programmes. Further, a workshop to prepare a roadmap of working with the State Government on the issue of extending these schemes to the states was scheduled for 17.04.2020 which could not be organized due to COVID-19, and this will be scheduled as soon as possible. ”
19. **The Committee had learnt that various Central and State Government schemes were not being implemented in the Cantonment areas as the State Government did not take into account the Cantonment Boards while formulating or implementing Schemes of Welfare for other municipalities. Therefore, they had recommended that the Ministry of Defence should vigorously take up the matter with the State Government concerned so that benefits of such schemes were also extended to the population living in Cantonment areas, especially the**

Scheduled Castes/Scheduled Tribes/ BPL Beneficiaries. In this regard, the Ministry of Defence has submitted that it has taken up the matter with the Chief Secretaries of all concerned State Governments *vide* its letter No. 6(2)/2015-D(Q&C) dated 05.11.2019 to issue suitable instructions to institutionalize implementation of Centrally Sponsored Schemes in Cantonment areas. Further, the Principal Directors, Defence Estates and various Commands are also pursuing it with concerned State Governments for inclusion of the Cantonment area/residents in its implementation programmes. However, a workshop to prepare a roadmap of working with the State Government on the issue of extending these schemes to the States scheduled for 17.04.2020 could not be organized due to COVID-19 and this will be scheduled as soon as possible. The Committee recommend that as the issue is inextricably linked to welfare of population in the Cantonment areas, the Ministry should conduct 'online workshop' and use digital/virtual platforms to communicate and engage with other stakeholders and expedite implementation of Central and State Governments schemes in the Cantonment areas.

F. AMMUNITION DUMPS

Recommendation Para No. 39

20. The Committee had recommended as under:

“The Committee, during their deliberations in connection with examination of Demands for Grants 2019-20, expressed concern over the hazards posed by the ammunition dumps in vicinity or amidst the inhabited areas of the country. The Committee desire that the Ministry of Defence should instruct the Services to relocate such ammunition dumps away from populated areas before any untoward incident take place. Here, it is pertinent to mention that almost all the Cantonments are currently situated amongst thick city population and are not mere secluded areas, away from the city dwelling units. The Committee may be apprised of the policy or guideline being issued within one month of the presentation of this Report.”

21. The Ministry in its action taken reply has stated as under:-

(a) “The issue highlighted at Para 48 of the minutes pertains to the efforts being undertaken for construction of underground (UG) storage of ammunition at a few locations in Northern and Eastern Commands in collaboration with NHPS, a Government of India enterprise. These projects are planned at forward areas where civil population around the ammunition storage area is limited.

(b) The types of ammunition storage areas with respect to civilian population around, can be classified as following types:-

- (i) Type A: Forward Gun areas, Ammunition bunkers where no civilian population exists. The ammunition dumps are smaller in dimension and hold very limited quantity of ammunition. Main criteria for such works is to reduce vulnerability to enemy fire, ensure safe storage and safety of troops.
- (ii) Type B: Formation Ammunition Dumps and forward Ammunition Points located in near vicinity of Line of Control/International Boundary. The civil population around these ammunition dumps is very limited. Medium size storage location are required capable of reducing vulnerability due to enemy action as also to enhance safety of troops/civil population.
- (iii) Type C: Ammunition Depots located in rear areas. These have civil localities in proximity to its periphery. Emphasis is required on large ammunition storage with a focus on reduction of Outside Quantity Distance (OQD) while enhancing safety of ammunition.

(c) The current project undertaken by Directorate General of Operation Logistic (DG OL) through NHPC are for Type A and B Ammunition Dumps. While the current initiative by Directorate General of Operation Logistics (DG OL) would be helpful for Type A and B Ammunition Storage Dumps, due consideration also needs to be given for ammunition being stored in type C locations. These are the areas where more than 80% of ammunition is stored. In view of the same, following is under consideration:-

- (i) Construction of Semi UG/UG Storage accommodations in Type 'C' to reduce Outside Quantity Distance (OQD).
- (ii) Storage of UN Hazard Division 1.2 type of ammunition in Igloos (meant for 1.1 UN hazard), specially in the periphery of Depots to mitigate higher OQD requirements."

22. The Committee note that efforts are being undertaken for construction of underground (UG) storage of ammunition at a few locations in Northern and Eastern Commands in collaboration with NHPC Limited. These projects are planned at forward areas where civil population around the ammunition storage area is limited i.e. Type A and B Ammunition Dumps. Further, for Type C Ammunition Storage Dumps, proposals for construction of Semi underground /underground Storage accommodations and storage of United Nations (UN) Hazard Division 1.2 type of ammunition in Igloos (meant for 1.1 UN hazard) are under consideration to mitigate higher Outside Quantity Distance (OQD) requirements. Since more than 80% of ammunition is stored in these Type C Ammunition Dumps, the Committee recommend that the execution of proposals for creation of safe storage of ammunition in areas close to civilian population should be accorded topmost priority. The concrete action

taken in this regard may be brought to the knowledge of the Committee at the earliest.

G. INTAKE OF SAINIK SCHOOL STUDENTS INTO NATIONAL DEFENCE ACADEMY

Recommendation No. 75

23. The Committee had recommended as under:

“The intake of girl students has already been commenced in the Sainik Schools, yet the Committee feel that more needs to be done in this regard so that the girl students are benefitted eventually. In this context, it is pertinent to mention here that it is the need of the hour that intake of girl cadets should be opened in the NDA. Once the new battalion is raised in NDA, as brought out in the foregoing paragraph, the girl cadets will also get an opportunity to serve the Forces through this important entry level. The committee, therefore, recommended that the proposal of entry of girl in NDA should be considered at top priority considering their admission has been initiated in the Sainik School and no stone should be left unturned in pursuance of this recommendation. The Committee would like to be apprised of the developments made in this regard.”

24. The Ministry in its action taken reply has stated as under:-

“Entry of women into NDA is a policy matter yet to be decided by Government of India. However, OTA Chennai (Army), INA, Ezhimala (Navy) and AFA Dundigul (Air Force) are open for entry of women post completion of graduation. Also, AFMS, Pune is open for women into Medical Branch of all three services after class XII. Further, women have also been inducted into Corps of Military Police and the first batch of women recruits are undergoing training at CMP Centre, Bengaluru.”

25. The Committee had recommended that the proposal of entry of girls in National Defence Academy (NDA) should be considered as a top priority considering their admission has been initiated in the Sainik Schools and no stone should be left unturned in pursuance of this recommendation. Though entry of women into the National Defence Academy is a policy matter yet to be decided by the Government, the Committee are hopeful that on the lines of various steps being taken to provide equal opportunities and benefits to women in the Forces, the doors of a premier training institution like NDA will soon be opened for them. Keeping in view that permanent commission has now been granted to women officers in the Army, it is imperative that highest quality training is also provided to girls and women to prepare them for future roles and challenges. Therefore, the Committee desire that latest status in this regard may be intimated while furnishing Action Taken Statements on this Report.

CHAPTER II

(A) OBSERVATIONS/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Ministry of Defence Budget and Demands for Grants 2019-20: A bird's eye view

Recommendation Nos. 1-4

After gleaning through all the facts and figures provided to the Committee, they find that there are four Demands for Grants in respect of the Ministry of Defence viz. Grant Number 18 – Ministry of Defence (Civil), Grant Number 19– Defence Services (Revenue), Grant Number 20 – Capital Outlay on Defence Services and Grant Number 21 – Defence (Pension). The Committee also find that the total budget for the Ministry of Defence for 2019-20 is Rs. 4,31,010.79 crore. 71 percent of this amount i.e. Rs. 3,05,296.07 crore has been allocated for Defence Services Estimates (DSE), which is conventionally known as India's Defence Budget. The Defence Services Estimates reflects the detailed estimates for the Defence Services and Organizations covered under Grant Number 19 {Defence Services (Revenue)} and Grant Number 20 (Capital Outlay on Defence Services) of the Ministry of Defence. The Services and Organizations covered under DSE are Army (including National Cadet Corps and Director General Quality Assurance, Military Farms and Ex-Servicemen Contributory Health Scheme, Navy (including Joint Staff), Air Force, Defence Research and Development Organization (DRDO) and Defence Ordnance Factories. Defence Pensions has claimed 26 percent of the total budget i.e. Rs. 1,12,079.57 crore. Defence Pensions, under Grant number 21, provides for Pensionary charges in respect of retired Defence personnel (including Defence civilian employees) of the three services viz. Army, Navy and Air Force and also employees of Ordnance Factories etc. It covers payment of Service pension, gratuity, family pension, disability pension, commuted value of pension, leave encashment etc. The remaining 3 percent of the total budget i.e. Rs. 13,635.15 crore have been allocated to Ministry of Defence (Civil) {Grant Number 18}. The requirements for the Civil expenditure (both revenue and capital) of the Ministry of Defence Secretariat, Defence Accounts Department, Canteen Stores Department, Defence Estates Organisation, Coast Guard Organisation, Jammu & Kashmir Light Infantry, Border Roads Organization, etc. are covered under Grant Number 18.

Trends in Ministry of Defence expenditure and compromises made due to reduced allocations

An analysis of the data provided by the Ministry of Defence on expenditure on Defence Services Estimates, Pensions and Ministry of Defence (Miscellaneous/Civil) reveals that allocation under these three Grants has shown an increase of Rs. 17,607 crore, Rs. 10,305 crore and (-) Rs. 361 crore in 2019-20 (BE), respectively, when compared to that in 2018-19. The total Defence Budget for 2019-20 is Rs. 4,31,011 crore, an increase of Rs. 27,551 crore than that in 2018-19. It is a matter of concern that as compared to 2018-19, while the total Defence Budget and Defence Services Estimates have shown an increase of 6.82 percent and 6.12 percent, respectively, Defence Pension has exhibited an increase of 10 percent in 2019-20(BE). The Defence Secretary, while tendering his evidence before the Committee, also shared his concern in this regard. He elaborated that while the budget in Defence Services Estimates has doubled in the past decade,

pension has increased thrice in amount. This has led to deficiency of funds in the requisite critical areas.

Another disconcerting feature which draws the attention of the Committee is mismatch between the projected and allocated Defence Budget. They have been apprised that as against projection of Rs. 4,05,784.84 crore under Defence Services Estimates for 2019-20 (BE), only Rs. 3,05,296.07 crore have been allocated i.e. a shortfall of Rs. 1,00,488.77 crore. Under the revenue segment, provision is first made for salary and other obligatory expenses. The balance allocation available is distributed to meet the requirement of stores (including ordnance), transportation (of personnel and stores), revenue works and maintenance, etc. In so far as the capital segment is concerned, funds are first set aside to meet the projected Committed Liabilities likely to materialise during the year. The remaining allocation is distributed to meet the projected requirement for other items. As per the Ministry's written submission, the allocated funds are optimally and fully utilized towards operational activities. If required, the schemes are reprioritized to ensure that urgent and critical capabilities are acquired without any compromise to operational preparedness of the Defence Forces. During oral evidence in connection with examination of Demands for Grants 2019-20, the Vice Chief of Naval Staff threw light on the complexities arising due to availability of limited funds which result in postponement of some items in the priority list for the financial year as payments to foreign vendors and Original equipment manufacturers has to be made compulsorily, which otherwise would lead to legal issues. The reprioritizing affects the payment schedule of Defence Public Sector Undertakings (DPSUs), which sometimes is pushed to next financial year. Thus, the reduced allocations are managed through prioritizing and delay in payments.

The Committee note that the Ministry and the Services have to resort to such ad-hoc mechanisms to manage their affairs in wake of reduced allocations. The Committee have always supported justified demands of increase of funds for Defence Budget at Budget and Revised Estimates stage and will continue to do so. Nevertheless, they recommend that all-out efforts be made and right trajectory be drawn to find new avenues of earning revenue. Seamless planning and coordination be undertaken by the Ministry of Defence, particularly in the field of Defence exports of arms and ammunition by Defence Public Sector Undertakings and Ordnance Factories board (OFB) to our friendly countries. The Committee fully concur with the assertion of the Defence Secretary, as brought out in other portions of this Report, that such exports not only create firm markets for our Defence products but also create 'dependence' on our products in the long run. The Committee however would like to see this as a reality sooner than later. They would like to be informed about the planning and execution in this regard and would like to be apprised in detail as this would be to its logical conclusion. The Committee have immense trust in talents of manpower, science and research available in the country. Indian Space Research Organisation's (ISRO) recent mission is a testimony to the technological and scientific prowess of our country. Therefore, the Committee exhort the Ministry, Services, DRDO, OFB and DPSUs to work in tandem to make India a global hub in defence manufacturing, earn revenue by exploring novel opportunities and areas and eliminate wasteful expenditure. Whenever required, invariable help be taken from the Ministry of External Affairs as well. The Committee also desire that the Ministry should give enough thrust to the application of principles of financial discipline and propriety and also avoid wasteful expenditure.

Reply of the Government

The recommendations of the Committee are noted for compliance. Necessary instructions are issued from time to time for adherence to financial propriety and avoidance of underutilization of funds/wasteful expenditure.

The Committee is assured that all efforts will be made to ensure optimum utilization of scarce resources. Based on progress of expenditure, pending committed liabilities etc., additional funds will be sought from Ministry of Finance at appropriate stage(s).

Growth of Defence Budget vis-à-vis rate of inflation:

Recommendation No. 5

The Committee have learnt that the annual rate of inflation as per the Economic Survey 2018-19 based on CPI-Combined New Series ranged around 3.4 percent. The annual rate of inflation based on monthly Wholesale Price Index (WPI) stood at 4.3 percent (Provisional) for the year 2018-19 as compared to 3.0 percent for the previous year 2017-18. The actual increase at the stage of Revised Estimates 2018-19 over actuals of 2017-18 amounts to only 0.10 percent after adjusting inflation rate of 3.4 percent. The Committee, in this regard, specifically recommend that allocations for Budget for the Ministry of Defence for 2019-20 at RE stage should be appropriately increased so that inflation does not nullify the benefits supposed to be accrued to the Forces after the actual increase in the funds.

Reply of the Government

This Ministry forwards projections made by the Services for additional funds to Ministry of Finance for favourable consideration. In RE 2019-20, an amount of Rs. 5,64,185.75 crore i.e. additional amount of Rs. 1,33,174.96 crore over BE 2019-20, was projected to Ministry of Finance. However, an amount of Rs. 4,48,820.10 Crore has been allocated by Ministry of Finance under the four Grants of Ministry of Defence, which is an increase of Rs. 17,809.31 Crore (4.13%) over BE 2019-20 allocations of Rs. 4,31,010.79 crore.

Chief of Defence Staff (CDS)

Recommendation No. 12

The Committee had, in their earlier reports, recommended creation of the post of Chief of Defence Staff for enabling better co-ordination among the Services. The Hon'ble Prime Minister announced creation of the post of Chief of Defence Staff on 15 August, 2019. While tendering his evidence before the Committee, the Defence Secretary submitted that the Cabinet has approved setting up of a Committee under the Chairmanship of National Security Advisor to finalise the roles, responsibilities and mandate of CDS. The Committee wholeheartedly welcome the creation of CDS and are of the considered view that it will go a long way in ensuring smooth cooperation amongst the three Services and all the Organisations falling under the ambit of the Ministry of Defence. This would not only strengthen the national security in the face of myriad regional and global threats but would also take our Forces to a high pedestal of combat/operational preparedness. They desire to be apprised of the latest developments in this regard within one month of the presentation of this Report.

Reply of the Government

Consequent to the approval of the Government for creation of the post of CDS in the rank of a four-star General with salary and perquisites equivalent to a Service Chief, General Bipin Rawat, has been appointed as the first CDS with effect from 31stDec, 2019. The CDS also heads the newly created Department of Military Affairs (DMA) in Ministry of Defence and functions as its Secretary.

Budgetary Allocation to BRO

Recommendation No. 14

The Committee note that budget to BRO has also been given by various other Ministries, besides the Ministry of Defence. Over the years, the budget of BRO is continuously growing. It has increased from Rs 4,668 Crore in 2015-16 to Rs 6,850.08 Crore in the year 2019-20. The Ministry was also asked to submit the details of the projected amount and allocation during same period, however, it has not submitted any information in this regard. In the absence of this information, it is very difficult to comment on the shortfall of funds allocated. The Committee hope that in future, the Ministry would share such information with the Committee in a time-bound manner so that the Committee could be at a better pedestal and make suitable recommendations wherever required.

Reply of the Government

Noted for compliance, the details of allocation to BRO, made by various Ministries at BE and RE stage and expenditure incurred during last five years are given below:-

(Rs in Crore)				
YEAR	AGENCY	BE	RE	Expenditure
2015-16	MoD (Misc)	3481	3316.22	3276.70
	MoRT&H	540	434.00	432.15
	MEA	76	56.31	56.22
	MHA	60	60.00	59.17

	MoD	442	447.08	440.14
	M DoNER	10	10.00	9.95
	Deposit	59	37.09	37.09
	Total	4668	4360.70	4311.42
2016-17	MoD (Misc)	3526	3790.87	3881.12
	MoRT&H	400	338.00	337.22
	MEA	57	40.62	40.51
	MHA	74	74.20	72.07
	MoD	845	602.04	606.01
	M DoNER	3	5.00	4.95
	Deposit	60	70.15	27.98
	Total	4965	4920.88	4969.86
2017-18	MoD (Misc)	4168.20	4180.69	4239.56
	MoRT&H	370.00	320.00	317.90
	MEA	35.08	49.75	49.75
	MHA	101.62	83.15	82.97
	MoD	523.60	726.43	725.67
	M DoNER	5.00	5.00	5.00
	Deposit	70.94	91.55	36.85
	Total	5274.44	5456.57	5457.70
2018-19	MoD (Misc)	4426.16	4860.77	5360.82
	MoRT&H	450.00	385.00	362.54
	MEA	34.91	42.33	42.33
	MHA	136.57	183.78	183.92
	MoD	510.35	692.21	691.68
	M DoNER	5.00	5.00	5.00
	Deposit	19.55	112.72	59.56
	Total	5582.54	6281.81	6705.85

(Rs. in crore)				
YEAR	AGENCY	BE	RE	Expenditure
2019-20 (Dec)	MoD (Civil)	5234.22	5688.91	4384.68
	MoRT&H	602.50	Not yet allotted	411.87
	MEA	26.30		12.82
	MHA	221.12		185.41
	MoD	925.85		694.41
	M DoNER	5.57		0.57
	Deposit	199.58		71.18
	Total	7215.15		5760.94

Recommendation No. 15

The Committee find that an additional amount of Rs. 1162.84 crore and Rs. 4 crore was sought from Ministry of Finance (MoF) during the second and third batch of Supplementary Demand for Grants 2018-19, respectively. Also, an additional amount of Rs 1303.84 crore was sought from

Ministry of Finance at the stage of Revised Estimates. In total, BRO demanded Rs 2470 crore from the Ministry, after the allocation of Rs 5582.54 crore for the year 2018-19. In the absence of projection data also, it makes a total of Rs 8052 crore (5582.54 + 2470). However, the final allocation made to BRO was Rs 6281.81 crore, which is Rs 1,770 crore short of the amount asked for. This amount is approximately 28 percent of the total allocation made in the year 2018-19.

Reply of the Government

(Rs in crore)				
YEAR	AGENCY	BE	RE	Expenditure
2018-19	MoD (Misc)	4426.16	4860.77	5360.82
	MoRT&H	450.00	385.00	362.54
	MEA	34.91	42.33	42.33
	MHA	136.57	183.78	183.92
	MoD	510.35	692.21	691.68
	M DoNER	5.00	5.00	5.00
	Deposit	19.55	112.72	59.56
	Total	5582.54	6281.81	6705.85

Further, for the above it may be seen that during FY 2018-19 against the additional demand of Rs 1306.84 crore under MoD (Misc), MoF has allocated additional Rs 434.61 crore at the RE stage.

Recommendation No. 16

The Committee understands that due to shortage of funds, construction and maintenance of bridges & roads, resurfacing works and other developmental activities get affected. Therefore, the Committee recommends that considering the atmosphere in the neighboring countries towards India, we must prioritize our spending and develop infrastructure and roads so our forces can ensure effective mobility of men and machine till the last post of the border. Due to paucity of funds, compromises are bound to be made and such a situation should be obviated in future to the maximum extent possible.

Reply of the Government

During the last three years there has been substantial increase in allocation of funds to BRO, as mentioned below:-

S. No.	Year	BE (Rs in crore)	RE (Rs in crore)	Expenditure (Rs in crore)
(i)	2016-17	4964.87	4920.88	4969.86
(ii)	2017-18	5274.44	5456.57	5457.70
(iii)	2018-19	5582.54	6281.81	6705.85

Required and existing number of equipment with BRO

Recommendation No. 17

The Committee take note of the details supplied by the Ministry regarding requirement and existing equipment of BRO for the last five years. As a consequence, they find that after delegation of financial powers to complete the preparatory action for timely procurement of both indigenous and foreign construction equipment to Directorate General Border Roads (DGBR), the gap between required and existing equipment with BRO, has been somewhat narrowed. The Ministry has also made an Annual Procurement Plan amounting to Rs 168.90 crore to support the procurement of equipment. However, the Committee infer from the figures supplied to them that in case of Air Compressors, Dozer-II and Tippers, the situation is not comfortable and requirement is way behind the existing strength. The Committee, therefore, recommends that with requisite allocation, essential equipment should be procured so that BRO can be able to construct the roads and infrastructure in the required time frame.

Reply of the Government

Earlier, the approval for procurement of equipments was based on the approved five year Long Term Equipment Plan which was not realistic with reference to the allocation of budget to BRO. Accordingly, Policy guidelines for preparation of Annual Works Plan (AWP) and Annual Procurement Plan (APP) with reference to fund allocation to BRO has been issued vide letter dated 19 June, 2017 so that the planning of works and the requirement of resources i.e. the size of APP is more realistic.

Accordingly, based on the requirement and shortage of equipments Annual Procurement Plan amounting to Rs 168.90 crore has been approved for FY 2019-20. Against the deficiency of Dozer size –II, tipper the details of requirement, holding and the approved Qty for procurement for FY 2019-20 is given below:-

Type of Equipment	FY 2019-20		Qty approved for procurement in APP 2019-20 (in Nos)	Remarks
	Requirement	Held		
Dozer-II Equivalent	1457	1317	90	Procured
Air Compressor	713	1123	NIL	-
Tippers	5266	4964	150	Procured

Construction of Roads by BRO

Recommendation No. 18

The Committee note that in order to concentrate simultaneously on the Northern and North-Eastern Borders and for the holistic development of roads in border areas, a five year (2018-23) Long Term Roll on Works Plan (LTRoWP) has been approved for the construction/improvement for 265 roads of length 14224.12 km, 4 Ditch cum Bund (DCB) of length 353.22 Km and 4 bridges. The

Committee also note that as such there is no specific definition for border roads and all roads strategically important approaching to border and approved in the LTRoWP is to be considered border roads.

Reply of the Government

The observations of the Committee are based on facts and hence no comments are offered.

Recommendation No. 19

The Committee further note that BRO is constructing 62 roads in Arunachal Pradesh, 7 roads in Himachal Pradesh, 61 roads in Jammu & Kashmir, 44 roads in Ladakh, 9 roads in Manipur, 2 roads in Nagaland, 24 roads in Uttarakhand, 1 road in Andaman & Nicobar, 8 roads in Mizoram, 6 roads in Punjab, 23 roads in Rajasthan, 18 roads in Sikkim and 8 roads in Bhutan. BRO has also constructed roads in Myanmar and Afghanistan.

Reply of the Government

The observations of the Committee are based on facts and hence no comments are offered.

Recommendation No. 20

The Committee recommends that construction of all 273 roads identified by Army should be completed in time bound schedule so there would be no hindrance to the men and machine in the movement. The Committee are also of the view that construction of roads in other countries proves that work of BRO is of international standard, therefore, they hope that BRO will make quality roads in the country also. The Committee desire that for this purpose, BRO should be given necessary help in procuring equipment and required budget and the Ministry should be propitious to assist in every conceivable area so that roads built in India are not only at par with international standards but also state-of-art.

Reply of the Government

Measures taken to facilitate construction of roads in border areas: To overcome the various impediments and to expedite the construction of roads in the border areas, the following specific measures have been taken:-

- (a) Guidelines for preparation of AWP and APP: In order to prioritize the Annual Works Plan and to make it more realistic with reference to the budget availability, new policy guidelines for preparation of AWP and APP have been issued.
- (b) Enhanced Delegation of Administrative and Financial Powers: The main objective of enhanced delegation of powers right upto the level of Chief Engineer and Task Force Commander is to bring transformational changes in the organization in order to improve the pace of execution of works to meet the requirement of the Armed Forces and to avoid delays on account of references between the Chief Engineer and HQ DGBR and also between HQ DGBR and MoD.
- (c) Engineering Procurement Construction (EPC) Mode of execution: In order to enhance the capacity of BRO and to ensure the completion of various roads projects in the border areas as per the requirement of the Army, guidelines for adoption of EPC mode of execution have been issued by the Ministry, so that BRO is able to outsource road projects to big companies.
- (d) State Governments of Sikkim, Arunachal Pradesh, J&K, Himachal Pradesh and Tripura have constituted the Empowered Committee to resolve the various issues of BRO.

Delay in execution of Projects and difficulties in maintenance of roads

Recommendation No. 21

The Committee learn from the reply furnished by the Ministry that certain delay in execution of road projects caused by the following reasons:

- (a) Delay in Forest/Wildlife clearance
- (b) Hard rock stretches
- (c) Limited working season
- (d) Difficulties in availability of construction material
- (e) Due to natural disaster, resources are diverted
- (f) Delay in land acquisition
- (g) Poor performance of contractors
- (h) Non availability of local labour

Reply of the Government

In order to facilitate the execution of infrastructure in the border areas the following measures have been taken:

- (i) Empowered Committee has been constituted in Arunachal Pradesh, Sikkim, Uttarakhand, Manipur, Jammu & Kashmir Union Territory and Tripura to resolve the issues

related to Land Acquisition, Forest & Wild life clearances and allotment of stone/sand quarries for construction of roads. As a result the under mentioned cases have been resolved:

(a) **Land Acquisition:** Out of 593 land acquisition cases, 314 cases have been resolved. The state wise details of pending cases are as under:-

S No.	State	Nos of cases
i	Jammu & Kashmir	131
ii	Himachal Pradesh	02
iii	Uttarakhand	27
iv	Arunachal Pradesh	95
v	Sikkim	06
vi	Nagaland/Manipur	02
vi	Mizoram	16
Total		279

(b) **Allotment of Quarry:** In Arunachal Pradesh out of 128 quarries, 60 Quarries have been notified by the Govt.

(c) **Forest Clearance:** At present no critical road project is affected due to forest clearance. However, 25 proposals are under process with various State Government.

(d) **Wild life Clearance:** As on date, no wild life clearance case is pending in respect of road projects of BRO.

(ii) To overcome the problems of hard rock stretches, heavy-duty Rock Drilling machines DC 400 has been imported from Switzerland and placed on various Indo-China Border Roads.

(iii) To overcome the shortage of construction materials, new technologies like Geocrete, Geo Cells / Geo Web and Soil stabilization with Biological Enzyme is being used for construction of roads.

Recommendation No. 22

The Committee also learns that issues related to land acquisition, forest/wildlife clearance and lack of quarries etc. are some of the impediments for the smooth progress of works. In order to resolve these issues, the State Government of Sikkim, Arunachal Pradesh, J&K, Himachal Pradesh and Tripura have constituted the Empowered Committee which is seen as a positive step in this direction.

The Ministry has also enumerated difficulties i.e. adverse and harsh climatic condition, non availability of sufficient labour, limited working season, repeated damages due to landslides, natural calamities i.e. flash floods and cloud burst, non allocation of stone/sand quarries by the State Governments, weak geological strata especially in North Eastern region causing sinking/formation breaches and also insurgency affected areas in maintenance of existing roads. In order to facilitate the maintenance of existing roads, DGBR has been delegated powers to fix/revise the rates for

maintenance and snow clearance grants for roads entrusted to BRO for maintenance and outsource maintenance of roads.

Reply of the Government

The observations of the Committee are based on facts and hence no comments are offered.

Recommendation No. 23

The Committee find that to overcome the various impediments as brought out in the preceding paragraphs and to expedite the construction of roads in the border areas, the Ministry has issued Guidelines for preparation of Annual Works Plan (AWP) and Annual Procurement Plan (APP) and enhanced Delegation of Administrative and Financial Powers it has also introduced Engineering Procurement Construction (EPC) Mode of execution in order to enhance the capacity of BRO and to ensure the completion of various roads projects in the border areas as per the requirement of the Army, guidelines for adoption of EPC mode of execution have been issued by the Ministry, so that BRO is able to outsource road projects to big companies. The Committee also note that States Government of Sikkim, Arunachal Pradesh, J&K, Himachal Pradesh and Tripura have constituted the Empowered Committee to resolve the various issues of BRO.

The Committee hope that above measures will bring out positive change in the working of BRO and would concentrate more in its given task, instead of wasting energy in getting approval from the Ministry for minor reasons. It goes without saying that BRO should primarily focus on its basic objective due to it was formed which is building roads in difficult areas. They should also broaden their selection base for employing their manpower as their job is labour intensive. One suggestion in this regard would be hiring manpower from that difficult terrain itself given to bleak employment opportunities and better adaptability of the local inhabitants.

Reply of the Government

BRO generally deploys tentatively 50,000 Casual paid labours for the construction of roads in the border areas along with the permanent manpower available with BRO. Most of the Casual paid labours are from the local areas where the roads are being constructed.

Recommendation No. 24

The Committee also desire for BRO there should be single window clearance system, which includes Central Government, State Government and other agency for wild life and forest clearance cases to speed up the progress of BRO roads. The Committee would specifically recommend that the issues relating to forest clearance must be handled very deftly as the Committee have come to that by the time clearances come, rest of the things for the roads etc. lag far behind the schedule. The Central/State Governments must be made to understand that in case of issues pertaining to the national safety and security are concerned, such clearances should be given at a very fast pace and as a special case.

Reply of the Government

Single window system has been established at District, State & MoEF level to fast track, processing of forest clearance cases pertaining to BRO on 09 Jul 2010.

Shortage of manpower

Recommendation No. 26

From the data furnished by the Ministry, the Committee note huge gap in the authorized and existing force level of BRO for the past five years. During the year 2014-15, the authorized force level was 42,646 and the existing force level was just 34,877. After some rationalization of posts, authorized force level was fixed as 41,600 in the year 2015-16 till the present, however, the number of existing strength tumbled down from 35,059 in 2015-16 to 34,188 in 2019-20. Further, for the post of Assistant Executive Engineer (Civil), against the 442 vacancies advertised only 112 officers joined. For AEE (Electrical & Mechanical), only 22 persons joined against the vacancy of 114, and for Medical Officer-II only 1 person joined the vacancy of 20.

The Committee find that in the lower grade also plenty of vacancies exist. Such a large number of existence of vacancies in the organization indicates that the service conditions or pay & allowances are not attractive enough to attract the youth of India especially in the times where emoluments of Government Sector almost at par with the Private Industry. Therefore, the Committee desire that the BRO should conduct a study to know the reasons for such indifference of candidates towards getting a job in BRO, and take measures accordingly to fill the gap, so that works of BRO can be accomplished as per plan.

Reply of the Government

The required (authorized) and existing force level of BRO is mentioned below:-

Authorized force level			Existing force level		
Officers	Subordinates	Total	Officers	Subordinates	Total
2426	39174	41600	1791	31718	33509

Note: Against the authorization of 41600 posts, 9082 posts are required to be rationalized against 11 Non-core positions in a phased manner.

The measures taken to fill up the vacancies in lower grade are given below:-

(i) **Group B & C**

(a) 1655 vacancies have been advertised and the recruitment is under process in phased manner at GREF Centre.

(b) Demand for 2046 vacancies for different posts to Staff Selection Commission (SSC) for the year 2019 have been placed and 118 vacancies against compassionate appointment is also under process.

There has been no formal study to know the reasons for such indifference of candidates towards getting a job in BRO, however, some of the reasons for indifference towards seeking a job in BRO are mentioned below:-

- (i) Remoteness of deployment.
- (ii) Difficult climatic conditions and health hazards.
- (iii) Negligible scope of posting in city/urban locations.
- (iv) Organization cannot provide alternative soft postings /family stations
- (v) Negligible pecuniary incentives
- (vi) Frequent transfers
- (vii) Despite the above difficulties people join the Organization due to economic condition and exit on getting better opportunity

INDIAN COAST GUARD

Requirement of adequate budgetary support

Recommendation No. 27

The Committee note with concern that for 2019-20, while the Indian Coast Guard (ICG) projected a requirement of Rs. 5,830 crore, only Rs. 2,750.00 crore has been allocated under the Capital Head i.e. approximately 43 per cent of the projected amount. Similarly, under the Revenue Head, while the Budget Estimates (BE) projection was Rs. 2,758.90 crore, the allocation has been Rs. 2,385.27 crore. In total, while the ICG projected a requirement of Rs. 8,588.90 crore, the allocation has been just Rs. 4,885.27 crore. As on 31st October, 2019, the Coast Guard has already spent 66 percent of the Revenue budget and 56 percent of the Capital budget allocated at Budget Estimates 2019-20. The Committee find that Rs. 2,955.94 crore for revenue expenditure and Rs. 3,630.00 crore for capital expenditure have been projected at Revised Estimates stage by ICG. The additional funds under Revenue head are required due to increase in prices of Petroleum, Oil and Lubricant (POL), carry over liabilities and operational deployment of assets. Similarly, committed liabilities, new schemes of Coastal Surveillance Network (CSN)-II, Dornier Mid-life upgradation, auxiliary barges, Capital Booking Revenue Procedure (CBRP) cases, major works and land acquisition, demand supplementary funds under Capital head.

Reply of the Government

The expenditure ceiling in respect of Coast Guard Organisation is provided/fixed by Ministry of Finance. Coast Guard Organisation projected a request for funds of Rs. 2891.00 crore under Revenue section and Rs. 4350.00 crore under Capital section for BE 2019-20 and the same projections were recommended to Ministry of Finance for consideration. Ministry of Finance fixed/provided the expenditure ceiling at Rs. 2385.27 crore in Revenue Section and Rs. 2500.00 crore in Capital Section for BE 2019-20. Further, Coast Guard Organisation projected funds of Rs. 2955.94 crore under Revenue section and Rs. 3630.00 crore under Capital section for RE 2019-20 and the same projections were recommended to Ministry of Finance for consideration. An amount of Rs. 2476.07 crore and Rs. 2600.00 crore in the Revenue Section and Capital Section respectively has been allocated for RE 2019-20.

As on 31.12.2019, the actual expenditure of Coast Guard Organisation under Capital section is Rs. 1656.34 crore (63 percent of RE) and under Revenue Section is Rs. 1975.89 crore (79.79 percent of RE). The allocated funds for FY 2019-20 are in line with the pace of expenditure & utilization of funds.

Recommended No. 28

The Committee understand that the Indian Coast Guard undertake multiple duties in addition to its main responsibility of Maritime Law Enforcement and undertaking Safety and Security tasks in Indian waters. It has wide range of duties and functions related to safety and protection of artificial islands and offshore terminals, protection of fishermen and provide assistance to them during distress at sea, preservation and protection of marine environment, assisting the Customs and other enforcement agencies in anti- smuggling operations, safety of life and property from natural or man-made disasters at sea and collection of meteorological and oceanographic data for use by the scientific fraternity etc. Indian Coast Guard is additionally responsible as Offshore Security Coordination agency, Lead Intelligence Agency for Coastal and Sea Borders, Competent National Authority (CNA) under South Asia Co-operative Environment Programme (SACEP) and National Coordinating Agency for Maritime Search and Rescue (MSAR). While tendering his evidence before the Committee, the Director General, Indian Coast Guard forthrightly presented demands for adequate budget and manpower for operation and maintenance of assets at sea, round the clock and throughout the year. Considering the significant multifarious tasks performed by the Indian Coast Guard and requirements of acquisition, development, maintenance and operational works to be undertaken this year, the Committee in no uncertain words recommend that requisite funds, as per projection, should be allocated to the Indian Coast Guard at Revised Estimates or Supplementary Grants stage. It goes without saying that in order to strengthen the Coast Guard and to enable them to effectively perform their duties, allocation of requisite funds assumes significance. The Committee would like to be apprised of the reasons as to why in total only 56.78 percent of funds were provided to the organization.

Reply of the Government

Coast Guard Organization projected funds of Rs. 3246.03 crore under Revenue section and Rs. 5350.00 crore under Capital section for BE 2020-21 and the same projections were recommended to Ministry of Finance for consideration. However, Ministry of Finance fixed/provided the expenditure ceiling at Rs. 5232.76 crore in Revenue Section and Rs. 2500.00 crore in Capital Section for BE 2020-21. The allocated funds for FY 2020-21 are in line with the pace of expenditure & utilization of funds. The requirements of Coast Guard for additional funds will be evaluated on overall threats perception, prioritization of requirements and their absorption capacity. It is also assured that operational preparedness of Coast Guard Organization are one of the priority areas of this Ministry and their critical requirements will not be compromised due to want of funds. Further, the requirement of additional funds by CGO will be taken up with Ministry of Finance at Supplementary and RE stages in FY 2020-21 for further consideration.

Required and Existing Manpower

Recommendation No. 29

The committee find that at present, total manpower strength with Coast Guard is 14,313 comprising of 1,982 officers, 10,997 Enrolled Personnel and 1,334 Civilian with shortages of about 15 percent being liquidated with enhanced induction rate. In his candid deposition before the committee, the Director General Indian Coast Guard highlighted the critical role served by manpower in Coast Guard by drawing its analogy with 'a policeman on the beat'. The committee acquiesce with the fact that the various operations viz. maritime law enforcement, coastal security and surveillance, protection of fishermen and merchant vessels during distress, disaster management at sea etc., have to be attended by Coast Guard organisation simultaneously in a single day. In the opinion of the committee, to undertake these functions effectively throughout the year, Coast Guard definitely requires strength to meet the challenges posed by emerging 'blue or ocean economy' discourse. Therefore, keeping in view demands of maritime security and various contingencies in sea and coastal areas of the country, the committee recommend that effective steps be taken so that the process of filling 15 percent shortage of manpower is done at the earliest. The timelines in this regard be intimated to this committee alongwith the process put in place to obviate delays for the same.

Reply of the Government

Following proactive steps have been taken towards liquidation of manpower shortage against sanctioned strength:-

- (a) Re-employment of Naval Short Service Commissioned officers at Comdt(JG) rank.
- (b) Seeking deputation of officers from Indian Navy.
- (c) Induction of Commercial Pilot (CPL) holders as pilots under Short Service Appointment (SSA) scheme.
- (d) Introduction of Short Service Appointment (SSA) Lady Officers Entry Scheme.
- (e) Online applications for Recruitment of officers and enrolled personnel.
- (f) Audio visual & print advertisements for publicity to generate awareness amongst general masses.
- (g) Preliminary selection undertaken at 06 different locations in respect of officers to garner maximum candidates.
- (h) Enrolled personnel are recruited from all over country by deputing selection committees at various places.
- (j) Special recruitment drive for induction of SC/ST candidates.

- (k) Lectures being conducted at various Schools/ Colleges to create awareness amongst youth for joining Coast Guard.
- (l) Separate CG website created for ease of processing online application forms.

The time line envisaged towards liquidation of shortages against sanctioned manpower is about 2-3 years.

Recommended No. 30

The committee also recommend that construction work of the Indian Coast Guard Academy in Mangalore, which would cater for the specialized task of the Indian Coast Guard as law enforcement agency, should be completed on priority within the timeframe. The committee be apprised of the developments in this regard alongwith the targeted dates etc. within one month of the presentation of this Report.

Reply of the Government

The ICG Academy is envisaged to cater for the professional training of personnel on subjects specific to Coast Guard's non-military charter of duties. The proposed academy is planned to cater for the training of 650 trainees, including the training needs of personnel from other maritime stakeholders including Navy, BSF(water wing), Marine Police and friendly foreign countries as part of International Cooperation.

AIP for acquisition of 160 acres land at New Mangalore for setting up of ICG Academy has been accorded by MoD on 26-11-2019. Presently Board of Officers has been convened for acquisition of land.

Estimated Timeline

(i) Year 2020

- (a) Acquisition/ Taking over/ survey of land.
- (b) Construction of boundary wall.
- (c) Land development.
- (d) Clearance from various Govt/Pvt agencies.

(ii) Year 2021

- (a) Preparation of Zonal plan/ Building plan
- (b) Tender action.
- (c) Commencement of Construction.

(iii) Year 2022-2025

Construction and Commissioning of Academy.

MILITARY ENGINEER SERVICES

Budgetary Provisions and Compromises made or likely to be made

Recommendation No. 31

The Committee find that in the Financial Year 2019-20, an amount of Rs. 7,889.94 crore has been allocated to MES under Capital Head, out of which 64 percent i.e. Rs. 5,060.23 crore have been spent as on 31st October, 2019. Under the, Revenue Head, MES has been allocated a sum of Rs. 10,154.30 crore, out of which 53 percent i.e. Rs. 5370.72 crore have been spent as on 31stOctober, 2019. The Committee also learn that to mitigate effects of the reduced allocation at Budget Estimates (BE) stage, Annual Major Works Programme (AMWP) ceilings for both Army and Air Force have been reduced, probable dates of completion accorded for delayed projects have been extended and certain sanctioned works have been re-appropriated/ foreclosed/ cancelled. The Committee understand that the Military Engineer Services (MES) is the premier construction agency and one of the pillars of Corps of Engineers of the Indian Army which provides rear line engineering support to the Armed Forces. Therefore, keeping in view that strategic civil and military projects which may be affected in absence of the requisite budget, the Committee recommend that adequate funds should be allocated to MES at Revised Estimates or Supplementary Grants stage. It goes without saying that all-out efforts be done by the Ministry in this regard. The role of MES is of paramount importance not only during peace time to build requisite infrastructure but also during war-time where their role is crucial in the mobility of forces to strategic locations.

Reply of the Government

The details mentioned in the report are factual. There has been no shortage of funds allocated to MES in the FY 2019-20 and no works have been affected due to non-availability of funds. Sufficient funds have also been allocated to MES in FY 2020-21.

Achievement of construction targets by MES

Recommendation No. 32

The Committee take note of the fact that as per written submission of the Ministry of Defence, by and large the MES has been able to achieve its construction targets for Capital Works, other than those where change in site or scope of work due to operational or administrative reasons or on account of hindrances. The comparison of targets versus achievement within the allocated funds can be gauged from the figures of actual final allocation versus final expenditure under Capital Head which ranges from 99 to 100 percent. The Committee, therefore, recommend that details of such projects in the last five years which were interrupted due to operational or administrative reasons alongwith specific reasons for obstruction, their completion stage at the time the projects were hindered/aborted/foreclosed, amount of money spent etc., may be furnished to them within one month of the of presentation of this Report. They also recommend that they be apprised of the steps being taken or proposed to be taken to ensure that such operational and administrative reasons for hindering the Capital works are invariably nullified and clientele satisfaction is ensured by MES.

Reply of the Government

1. Some works are under hindrance due to operational and other unavoidable reasons. Details of these works under hindrances during last five financial years are as under:-

Serial Number	Service	Works under Hindrance (Reason)											
		Tree Cutting		Change in Scope of Work		Change of Site/ Site Clearance		Awaiting Clearance (CFEES)		Miscellaneous Reasons		Total	
		Number	Amount in Rs. Crore	Number	Amount in Rs. Crore	Number	Amount in Rs. Crore	Number	Amount in Rs. Crore	Number	Amount in Rs. Crore	Number	Amount in Rs. Crore
(a)	Army	18	456.16	07	219.83	12	96.30	-	-	08	61.26	45	833.55
(b)	Navy	04	143.70	06	95.84	05	41.44	-	-	04	126.09	19	407.07
(c)	Air Force	10	124.08	19	196.59	03	8.25	02	23.08	01	10.51	35	362.51
Total		32	723.94	32	512.26	20	145.99	02	23.08	13	197.86	99	1603.13

2. **Steps to Nullify Hindrances.** The following actions are being taken to avoid hindrances:-
- Receipt of tender when an encumbrance free site is available.
 - Involvement of user right from planning stage so as to ensure no change in scope of work after sanction.
 - Obtaining clearances in advance prior to sanctioning of work.
 - MoD has issued a revised policy for expediting tree cutting activity. This is likely to bring down delays in commencement of projects held up for want of tree cutting.

DIRECTORATE GENERAL DEFENCE ESTATES

Budgetary provision

Recommendation No. 33:

The Committee note that an amount of Rs. 479.46 crore and Rs. 15.86 crore has been allocated to Defence Estates Organization (DEO) for 2019-20 BE under Revenue and Capital Head, respectively. This amount is Rs. 53.19 crore and Rs. 13.02 crore more than the Actuals of 2018-19 in Revenue and Capital Head respectively. Again, the projected amount at Revised Estimates (2019-20) is Rs. 1,459.07 crore for revenue expenditure and Rs. 29.97 for the Capital expenditure. The Committee would like to be apprised of the reasons behind the steep demand of additional funds of Rs. 979.61 crore for Revenue Expenditure at RE stage and its utilization.

Reply of the Ministry

The provision in BE 2019-20 was Rs. 479.46 crore (Rs. 474.54 under MH- 2052 + Rs. 4.92 crore under MH- 2059). DGDE projected their requirement of Rs. 1453.36 crore (Rs. 1154.18 crore for Grants-in-aid-General + Rs. 100.00 crore for Grants for creation of Capital Assets +Rs. 85.23 crore for Grants in Aid General (SAP) &Rs. 113.95 crore for others expenditure) for RE 2019-20 in Revenue section and the same was forwarded to Ministry of Finance for consideration. In this context, it is stated that main reason behind the steep demand for additional funds to the tune of Rs. 979.61 crores sought by DGDE for RE 2019-20 against the BE 2019-20 of Rs. 474.54 crore under MH- 2052 is primarily to meet the expenditure towards payment of Salaries and Pensions to Cantonment Boards under object head Grants-in-aid (augmentation of Rs. 857.02 crore) and for creation of Capital assets under Object Head Grants for Creation of Capital Assets (Rs. Augmentation of 46.46 cr) and additional funds of Rs. 70.23 crore under Object Head Grants in Aid (SAP) for Swachta Action Plan (SAP) to be carried out by Cantonment Boards in RE 2019-20. Besides, DGDE had also sought funds of Rs.5.71 crore in RE for maintenance of office buildings under MH- 2059- Maintenance of other buildings against the BE 2019-20 of Rs. 4.92 crore.

Revenue Sources

Recommendation Nos. 34-35

The Cantonment Boards are local autonomous bodies have their own budget and own local sources of revenue such as Property tax, fees under Section 67 of Cantonment Act, 2006, service charges from Government properties etc. apart from Grant-in- Aid as sanctioned by Central Government. The budget of Defence Estates Organization is allotted under Demands for Grants and revenue Sources comprise of Auction of trees, license fees, Damage charges, auction of advertisement rights, ground rent fee and monetary compensation received for transfer of defence land. During their power point presentation before the committee, the representatives of the Ministry of Defence enumerated the details regarding financial limitations of the Cantonment boards. These include demand of service charges not being fully met, small area/population with limited tax base, dependence of commercialization/ redevelopment of properties on land tenures and security considerations, restrictive land use/ construction policy, unwillingness of states (except Telangana, MP, Jharkhand, Delhi and Karnataka) to share tax/ Other revenue proceeds etc. The introduction of Goods and service Tax (GST) and Subsuming of Octroi/ Terminal Tax/ Local Body Tax has led to annual loss of revenue of about INR 165 crore in 16 Cantonment Boards w.e.f. 2017-18.

In the Committee's opinion, the Ministry of Defence may explore the options of commercialization of non-sensitive defence lands. Such as leasing lands to commercial establishments etc. to increase the sources of revenue so that the Cantonment Boards are able to provide better public services of health, education etc. to their residents. The Committee recommend that a study may be done by the Ministry in this regard and they be apprised accordingly.

Reply of the Government

With regard to the option of commercialization of non-sensitive defence lands, such as leasing lands to commercial establishment etc. to increase the source of revenue, it is intimated that very limited vacant Class – C defence land is available for this purpose with Cantonment Boards.

The redevelopment of certain pockets of non-sensitive defence land in the Cantonment which would yield commercial revenue through leasing of such asset is under consideration in Delhi Cantonment Board. Other similar projects would be examined by Cantonment Boards.

Building Bye- laws

Recommendation No. 37

During the deliberations of the Committee, the issues relating to archaic building bye-laws such as inadequate Floor Space Index (FSI), Floor Area Ratio(FAR), old lease agreements etc were brought out. The Committee have been apprised that examination of existing building bye laws is one of the terms of reference of the expert committee headed by Shri Sumit Bose. The Expert committee has submitted its report to the Ministry of Defence and the matter is under examination. The Committee hope that the amendments in the laws will provide much needed relief to the residents of the Cantonment areas and would like to be apprised of the status of implementation of the report of the Bose committee at the earliest but in any case by the time of furnishing Action Notes to the Committee.

Reply of the Government

MoD had also constituted an Expert Committee on Working of Cantonment Boards vide MoD ID No. 14(12)/2018-D(Q&C) dated 31.08.2018 as referred in para 2(a). The Terms of Reference of the Committee also included **(i)** To make specific recommendations in connection with building bye-laws in Cantonments to align them with the best practices and create an incentive structure particularly with respect to energy efficiency, green building, water conservation/rain water harvesting, fire safety standards, disaster resilience, sanitation including zero liquid discharge, etc. and initiation of on-line clearances of building norms; and **(ii)** To review the existing Floor Space Index (FSI) across Cantonments, and make recommendations on future rationalization. The Committee has given its recommendations on 13.02.2019 and matter is being actively progressed.

Recommendation No. 38

With the passage of time and changing shape of ever growing urbanization, the committee find the inspite of all efforts done by them, the cantonments are not able to maintain their pristine status. As already mentioned in these recommendations, the Cantonments now figure mostly in the central parts of the cities. It is in this context, the committee would like to recommend that when any bills in regards to urban ceiling etc., are introduced/put to consultative state, the Cantonments should take advantage of the same and maintain a balance where the interests of the civil population are not hurt and they also do not lose their status. The mail problem witnessed by the committee is in regards to the use of roads passing through the cantonments is in regard to the use of roads passing through the cantonments, use of hospitals, schools etc. by the civil population. The committee in this regards desire that balanced decisions be taken so as to build mutual faith and camaraderie between the civil society and defence dispensation.

Reply of the Government

All efforts are made to maintain the balance between military interests and needs and aspirations of the civilian residents in the Cantonments. As regards roads, Ministry of Defence vide

letter No 14(9)/2018-D(Q&C) dated 04.09.2018 has issued detailed procedure to be followed by Cantonment Boards for closure of roads in Cantonments and no public road in the Cantonment shall be closed without following the laid down procedure, as per Section 258 of the Cantonments Act, 2006. The Cantonment Boards are accordingly taking action in this matter.

With regard to hospital and schools, most Cantonment Boards are maintaining hospital and dispensaries and schools, including schools for specially abled, and such services are available to all residents, whether military personnel or civil population.

Encroachment of Defence Lands

Recommendation Nos. 40-41

The total area of defence land under the management of Defence Estates Organisation (DEO) is 66,097 acres. The Committee have been informed that as on 30.06.2019, about 4,505 acres of Defence Land under the management of DEO is under encroachment. The committee note that 25.37 percent and 21.03 percent of the encroached Defence land lies in Bhopal and Allahabad, respectively. The Ministry has submitted that while old encroachments are being removed gradually, following steps have been taken to not allow new encroachments and to take prompt action against such cases.

- a) Annual certificate is obtained from the Station Commander or the Defence Estate Officer under whose management the land is placed, as the case may be, under the provisions of Rule 14 of Acquisition, Custody Relinquishment, etc., or Military Lands in India (A.C.R. Rules), 1944 or Rule 13 of Cantonment Land Administration Rules (CLAR), 1937 which provides information on physical verification of land and unauthorised constructions or encroachments thereon. This enables the concerned defence authorities to take stock of illegal or unauthorised occupation and monitor action taken by field officers.
- b) Demarcation survey of entire defence land outside Cantonments and detailed polygon survey of defence land inside Cantonments have already been undertaken which has enabled the concerned authorities to reconcile and recorded land data with the physical occupation of land and also to ascertain if there are encroachments on defence land.
- c) Computerisation of defence land records and digitization of important land files and documents have also resulted in efficient management of records and taking timely action against illegal encroachments or addressing land disputes.
- d) The process of defence land audit has been institutionalised from 2011-12 as a continuing process.
- e) A Committee has been constituted under the Chairmanship of Additional Secretary, Ministry of Defence which periodically reviews action taken on removal of encroachments and also suggests ways and means to make the system more efficient from time to time.

The Committee have been apprised that because of regular monitoring and timely action by Defence Estates Officers and Chief Executive Officers, 215.78 acres of encroachments have been removed in the last three years and 25.82 acres in 2019 (upto 30.06.2019). They recommend that alongwith the steps mentioned above by the Ministry to remove encroachments on defence lands, special attention should be provided to Bhopal, Allahabad and Danapur as these regions account for almost half of the encroachment on defence land under the management of Defence Estates Organisation. The efforts of the Ministry in this direction may be apprised to the Committee within three months of the presentation of this Report. The Committee further desire that details and nature of various litigations received in connection with Defence Estates Organization and Cantonment areas may be furnished to them at the earliest.

Reply of the Government

As on 31.12.2019, about 4458 acres of defence land is under encroachment, held under the management of Defence Estates Organisation. Cantonment-wise details of encroachment under the management of Defence Estates Organisation is enclosed herewith as Annexure.

Detection, prevention and removal of encroachments is an ongoing process. While old encroachments are being removed gradually, due efforts are being made not to allow new encroachments and to take prompt action against such cases.

Directions have been issued by DGDE to Principle Directors of Defence Estates Southern & Central Command to direct concerned DEOs of Bhopal, Allahabad & Danapur to take necessary action to remove encroachments from defence land and give special emphasis on removal of encroachment under these three DEO circles and to submit a Quarterly report on the status of encroachment removal efforts.

The latest status of encroachments under the management of DEO Bhopal, Allahabad and Danapur and the action taken of encroachment removal is as under:

DEO, Bhopal

Total encroached defence land under the management of DEO, Bhopal in respect of about 382 numbers of encroachments is for an area of 1085.72 acres. In all 382 cases, under DEO, Bhopal, PPE Act proceedings for eviction of unauthorized occupants/ encroachers from Defence land have been initiated.

As a result of various measures taken by DEO Bhopal, incidence of encroachment of defence land has declined significantly in the recent past. During the last three years, i.e. 2017-2019, only 01 encroachment with an area of 0.0029 acre of defence land under the management of the Defence Estates Organisation has been reported. During the last 03 years period, 63 numbers of encroachment with an area of 1.9320 acres of defence land under the management of the Defence Estates Organisation have been freed from encroachments.

DEO, Allahabad

The total number of encroachments on defence land under the management of DEO, Allahabad is about 2515 with an area of 900 acres and all these cases are more than 20 years old.

Action had been earlier initiated under the provision of PPE Act, 1971 for eviction of unauthorized occupants/encroachers for which initial notices were issued to the encroachers. Continuous efforts are being taken by the DEO to prevent further encroachments.

DEO, Danapur

The total number of encroachments on defence land under the management of DEO, Danapur is about 1266 with an area of 417.462 acres and most of these cases are more than 20 years old. DEO, Danapur has issued 332 notices under sub section 2 of section 5A of the PPE act, 1971 to the encroachers. Efforts are being made to keep the defence land encroachment free.

Annexure-1

Cantonment-wise details of encroachment on defence land under the management of Defence Estates Organisation

S. N.	Directorate	Name of DEO Circle	Name of Cantonment	State	Inside Cantonment	Outside Cantonment
					Are (in acres)	Are (in acres)
1	2	3	4	5	6	7
1	Central Command	Agra	Agra	Uttar Pradesh	9.1732	118.0810
			Mathura	Uttar Pradesh	6.1116	
		Allahabad	Allahabad	Uttar Pradesh	245.0980	653.3290
			Faizabad	Uttar Pradesh	4.9968	
			Varanasi	Uttar Pradesh	0.4590	
		Bareilly	Bareilly	Uttar Pradesh	15.9212	6.3152
			Shahjahanpur		0.5330	
		Lucknow	Fatehgarh	Uttar Pradesh	6.3760	67.6090
			Kanpur	Uttar Pradesh	3.3394	
			Lucknow	Uttar Pradesh	36.9978	
		Meerut	Meerut	Uttar Pradesh	27.1389	14.1037
			Shahrnpur	Uttar Pradesh	0.1340	
		Meerut	Chakrata	Uttarakhand	0.0000	7.2510
			Clement Town		0.0000	
			Dehradun		10.6030	
			Landour	Uttarakhand	0.3353	
			Lansdowne	Uttarakhand	0.0052	
		Roorkee	Roorkee	Uttarakhand	0.0183	
		Bareilly	Almora	Uttarakhand	0.0308	1.1100
Nainital			0.0000			
Ranikhet	Uttarakhand		1.6153			
Jabalpur	Jabalpur	Madhya Pradesh	173.3654	31.1121		
	Jabalpur	Madhya Pradesh	3.9390			
	Pachmarhi		0.2010			
Mhow	Mhow	Madhya Pradesh	57.1727	0.0000		
Danapur	Danapur	Bihar	1.0410	409.6910		
Danapur	Ramgarh	Jharkhand	0.6100	7.5800		
Jabalpur	No cantt	Chhatisgarh	0.0000	165.7680		
Sub Total					605.2158	1481.9500
2	Western Command	Delhi	Delhi	Delhi	32.9450	29.6670
			Delhi	Haryana		
		Ambala	Ambala	Haryana	241.4850	114.4400
			Dagshai	Himachal Pradesh	11.9790	
			Jutogh	Himachal Pradesh	0.0437	
			Kasauli	Himachal Pradesh	4.2147	
			Sabantu	Himachal Pradesh	5.9969	
		Pathankot	Pathankot	Himachal Pradesh		19.3030
			Dalhousie	Himachal Pradesh	0.0510	
Pathankot	Punjab			18.5310		

		Jammu	Jammu	J&K	12.7747			
			Jammu	J&K	1.0500			
		Chandigarh	Chandigarh	Punjab		20.0718		
		Jalandhar	Amritsar	Punjab	0.0000	58.9599		
			Ferozepur	Punjab	25.6314			
			Jalandhar	Punjab	0.9985			
		Sub Total			337.1699	260.9727		
3	Northern Command	Srinagar	Badamibagh	J&K	11.6400	8.3220		
		Sub Total			11.6400	8.3220		
4	Eastern Command	Kolkata	Barrackpore	West Bengal	0.2873	2.2849		
		Siliguri	Jalapahar	West Bengal	0.0000	85.7000		
					Bihar	0.0000	56.6380	
		Guwahati	Shillong	Meghalaya	0.5518			
		Sub Total			0.8391	144.6229		
	Southern Command	Ahmedabad	Ahmedabad	Gujarat	0.2482	2.9531		
			Bangalore	Belgaum	Karnataka	0.9327	0.9480	
			Bhopal	Babina	Uttar Pradesh	0.6376	1085.7144	
				Jhansi	Uttar Pradesh	1.0103		
				Morar	Madhya Pradesh	0.0000		
				Pachmarhi	Madhya Pradesh	1.8400		
				Saugor	Madhya Pradesh	5.5490		
			Chennai	St Thomas Mount Cum Pallavaram	Tamilnadu	3.9387	34.2665	
					Wellington	Tamilnadu		0.0465
			Cochin	Cannanore	Kerala	0.1085	1.7954	
			Jodhpur	Ajmer	Rajasthan	1.5836	3.0694	
					Nasirabad	Rajasthan		19.9721
			Mumbai	Deolali	Maharashtra	1.8262	142.9879	
					Kamptee	Maharashtra		0.9176
			Pune	Ahmednagar	Maharashtra	0.9346	43.8804	
					Aurangabad	Maharashtra		5.1551
					Dehu Road	Maharashtra		5.0690
					Kirkee	Maharashtra		6.0904
					Pune	Maharashtra		0.2557
			Secunderabad		Maharashtra		133.6540	
					Secunderabad	Telangana		4.1178
			Visakhapatnam		Andhra Pradesh		12.6000	
			Sub Total			60.2336	1461.8691	
	South Western Command	Bhatinda		Haryana	0.0000	79.4212		
					Punjab	0.0000	6.0500	
			Sub Total			0.0000	85.4712	
	G. Total				1015.0984	3443.2079		

Total Encroachment Inside and Out side Cantt.

4458.306

Inconvenience to Civilian population

Recommendation No. 42

The Committee had taken up the issue of inconvenience to civilian population residing in Cantonments during the examination of Demands for Grants 2018-19. Similar issues, especially in the southern Command were also raised during the course of deliberations this year. The committee desire that DGDE and his representatives take appropriate measures for resolving such issues amicably so that there would be no tension or conflict between the civilians and the military personnel. The committee reiterate their recommendation that the Ministry of Defence instruct the Local Military Authority (LMA) and the Cantonment Board Officers to get in touch with local Members of Parliament and Members of Legislative Assembly to Sort out such matters amicably as and when they arise. The Committee also desire that a copy of communication and details of meetings may be communicated to them.

Reply of the Government

The Committee recommended that the MoD may instruct Local Military Authority (LMA) and Cantonment Board Officers to get in touch with local Members of Parliament and Members of Legislative Assembly to sort out such matters amicably as and when they arise. As regards the Cantonment Boards, the CEOs maintain close liaison with the Hon'ble MPs and MLAs of the Cantonment areas concerned. Further, Hon'ble MPs and MLAs are invited to every Cantonment Board meeting under Section 12(9) of the Cantonments Act, 2006 and many Hon'ble MPs and MLAs also attend the Cantonment Board meetings as per their convenience. Directions in compliance with the Committee's recommendations have been given to the DGDE and AHQ.

DEFENCE PUBLIC SECTOR UNDERTAKINGS (DPSUS)

Order Book Challenges and Declining trend of production in Defence Public Sector Undertakings (DPSUs)

Recommendations Nos. 43-44

After gleaning through the information and material supplied to the Committee and the oral evidence of the representatives of the Ministry of Defence, the Committee with certitude stress the need for the strong functioning, existence and growth of all the nine Central Defence Public Sector Undertakings in the national interest. Their role and contribution in the national security is in the paramount interest of not only the Defence Forces but the country as a whole.

The Committee note with profound concern the order book challenges and the plummeting trend of production in almost all the DPSUs of the country. Though Hindustan Aeronautics Limited (HAL) recorded turnover of Rs 19,705 crore in the last financial year 2018-19, the major part of existing orders for supply of aircraft and helicopters will be liquidated shortly with the major manufacturing order of Su-30MKI aircraft being completed in 2019-20. There is no firm order currently available on the company beyond 2021-22. The Value of Production (VoP) in Bharat

Dynamics Limited (BDL) in 2018-19 was Rs 3,235 crore, Rs 1,406 crore lesser than that in 2017-18. The major portion of ground support equipment for AKASH Ground Support Equipment (GSE) was executed in 2017-18 itself and the balance order book of GSE is amounting to Rs 526 crore, out of which Rs 269 crore executed in 2018-19 and balance Rs 257 crore will be executed in 2019-20. Further order for MILAN-2T missiles and refurbishment is awaited. Akash Surface-to-Air Missile army order will be completed by 2019-20. In case of Garden Reach Shipbuilders and Engineers Ltd (GRSE), the reduction in VoP is due to the fact that the current projects are in the final stages of execution wherein conventionally the rate of increase in value of production tends to saturate. In Goa Shipyard Limited (GSL), VoP declined in 2018-19 in view of interim low order book position and project P1135.6 at design stage. The VoP achieved in Hindustan Shipyard Limited (HSL) for 2018-19 was Rs 595 crore, Rs 49.78 crore lesser than that in 2017-18.

Reply of the Government

Defence PSUs are diversifying their product profile into other areas and has robust plans for technology, Research and Development, Infrastructure Development, export promotion and focus on indigenization, which will ensure the sustenance of DPSUs and improve their order book position in long term. Further, DPSUs have also adopted several new technologies which include Artificial Intelligence (around 50 AI enabled products are under development by DPSUs); Cloud Base technology; Robotics; use of unmanned vehicles; composite R&D for design and developments of products; 3D printing; Integrated construction methodology for warship construction. DPSUs are also focusing on Modernization of Infrastructure and technology. The CAPEX plan for modernisation of Defence PSUs is around Rs. 2756 Cr.

The order book volume of Defence PSUs depends on the customers which is primarily the Armed Forces and export opportunities in the International market. Department of Defence Production is taking many steps to improve the order book position of DPSUs are detailed below:

(a) Buy (Indian- Indigenously Designed, Developed and Manufactured) :

- In Defence Procurement Procedure 2016 under Capital Acquisition, preference is being given to Buy (Indian- Indigenously Designed, Developed and Manufactured). The order of preference/priority in decreasing order under this Procedure is categorized as follows:-
 - (a) Buy (Indian - IDDM)
 - (b) Buy (Indian)
 - (c) Buy and Make (Indian)
 - (d) Buy and Make
 - (e) Buy (Global)

(b) To Boost-up the Export in Defence Production following steps/initiatives have been taken:

- **Open General Export Licence (OGEL) System for Promoting Defence Export:** As part of creating greater ease of doing business for Defence exporters, DDP has notified two (02) OGEL for intra company transfer of technology and for export of parts and components. Under OGEL the Indian Defence Industries will be permitted to export specified items to specified destinations enumerated in the OGEL without approaching this Department for export authorization requirements during the period of validity of the

OGEL (i.e. 02 years). The companies will be required to have established Inter Compliance Programme (ICP) or Export Compliance Programme (ECP) before seeking OGEL.

- Rationalizing the Standard Operating Procedure (SOP) for reducing the time taken and cut down red tapism.
- Export Promotion Cell Set up.
- Scheme for funding marketing activities by Defence Attaches for promoting exports.
- Fully automated export portal and electronic sharing of export leads with relevant industry.
- Dispensing with the requirement of End User Certificate by Government for exports of parts/ components.
- Simplified procedure for tender, exhibitions, testing, etc.
- SOP formulated to facilitate exports of 'Munitions List' under category 6 of SCOMET by DGFT.
- Streamlining export using Line of Credit for items already sold to Indian military.

As a result of these reforms, defence export permissions have increased from Rs. 1940.64 crore in 2014-15 to Rs. 10,745 crore in 2018-19.

(c) Indigenization:

- i. Policy for Indigenization was notified on by Department of Defence Production on 08 March, 2019, with the objective "to create an industry ecosystem. It is estimated that Defence PSUs will reduce the import bill more than Rs 15000 Cr by 2022 through indigenization of products and processes.
- ii. These Strategies are under implementation and some major achievements are as given below: -
 - **Development of Indigenization Portal:** DPSUs/OFB are uploading the data on the link provided. The proposed Indigenization portal will be a centralized one in which DPSUs/OFB and other stakeholders will be showcasing their imported items to be indigenized. Vendor will become aware of the above items and they can in turn, show their interest in those items where they have capability to manufacture.
 - **Study on savings in cost –** IDSA, Delhi is studying savings in cost due to indigenization in the last 5 years in DPSUs/OFB. Final report submitted in Jan 2020.
 - **Implementation of Make-II –** The Make-II framework for implementation by DPSUs/OFB was notified on 11.02.2019. DPSUs/OFB have identified approx. 2500 items under Make-II. These items are at various stages of development process.
 - **Long Term Orders –** "Framework for placing Long Term Orders by DPSUs" has been approved by Hon'ble RM on 04 Nov 2019. Under this Framework, the procuring organization may aggregate demand of the item for a long period of upto 10 years, in cases where it finds challenges in indigenization.

(d) Other Initiatives

- **Testing and Certification** - MoD/DDP has issued Government Orders for testing of items being indigenized/ priority in testing and certification on 28Aug 2019. It covers aspects like use of test facilities for R&D without asking for End User Certificate, fixation of insurance cost, transparency in declaration of test results and minimizing delays.
- **Third Party Testing**- Third Party Inspection (TPI) is being implemented by DGQA and DGAQA both.
- **Testing Infrastructure for Industry**-Defence Testing Infrastructure Scheme (DTIS) has been prepared. It proposes to setup 6 to 8 new green field Defence Testing Infrastructure with total grant-in-aid of Rs 400 Crs.

Further, the details of project that are under the pipeline of DPSUs are as below:

S. No.	Name of DPSU	Major Order/Product details
1	HAL	Light Combat Aircraft (LCA), Light Combat Helicopter (LCH) and Basic Trainer HTT-40 etc.
2	BEL	Coast Surveillance System, Spares for long range surface to air missile (LRSAM) system, Delhi CC TV etc.
3	BEML	8x8 HMVs for PINAKA, HMVs Coastal Surveillance System, HMVs ASCON, 8x8 HMVs- AKASH Army, 8x8 HMVs- AKASH Air Force etc.
4	BDL	Akash(IAF), Medium range surface to air Missiles (MRSAM) (IAF & Navy), Very short range Air Defence System, Milan 2T, Counter Measure Dispensing System(CDMS) etc.
5	MIDHANI	Special Steel, Super alloys, breech ring, titanium plates etc.
6	GRSE	Pollution Control Vessels, Air Cushion Vehicles for ICG & Indian Army, Next Generation Missile Vessel (NGMV), Multi-Purpose Vessels, Survey Training Vessel, Self-propelled fuel barge etc.
7	GSL	Pollution control vessels, fast patrol vessels, Advanced Infantry Floating Footbridge, Next Generation Missile Vessel, Multi-Purpose Vessel, Survey training vessel, Pax all-weather vessel, 12 ton patrol modified boats etc.
8	HSL	Fleet support Ships etc.

Detailed DPSUs-wise reply is as under:

HAL: Yes it's a fact that as per the current order book position, there are no firm order available on HAL beyond 2021-22. Orders for supply of 83 LCA Mk1A and 15 LCH (Light Combat Helicopter) are expected for which HAL has already submitted quotations. An additional order for 12 Su-30MKI is also expected in the near future. However, even with these orders in the pipeline, the established capacities will not be fully loaded. Aerospace manufacturing being a niche strategic segment, the growth and establishment of which involves careful nurturing over years. Corrective measures are required to avoid financial cum intellectual loss for the nation, poised by the underutilisation of national asset like HAL. To avoid this imminent fiasco, expeditious measures needs to be initiated, considering cycle time of 18-36 months in the aircraft industry. The effect of underutilisation of HAL facility will have a

cascading effect from two major vantage points. Low workload at HAL will in-turn lead to low workload scenario in many support manufacturing industries, considering that close to 30% of the HAL man-hours is being sourced through India Private sector manufacturing partners including MSMEs. This will be a severe blow to the huge defence manufacturing ecosystem in the country, nurtured by the company. Further, the skilled manpower if left to idle for long will be an irrecoverable loss leading to lowering the overall skill base in the country.

BDL: Present order book position of BDL is precariously low for its existing capacity and workforce. BDL has proved itself and achieved turnover of Rs.4887 Crore, Rs.4588 Crore and Rs.3069 Crore year on year from 2016-17, 2017-18 and 2018-19. Value of Production in 2018-19 was Rs.3235 Crore which is less by Rs.1406 Crore than that of 2017-18.

- a. Akash GSE:Reduction in VoP of GSE is because major portion of Ground Support Equipment were executed in 2017-18 itself and the balance order book of GSE amounting to Rs.526 Crore, out of which Rs.269 Crore executed in 2018-19 and balance Rs.257 Crore will be executed in 2019-20.
- b. Milan – 2T and Refurbishment:During 2017-18, BDL had firm order of Milan 2T and Refurbishment whereas in 2018-19 there was no order of Milan 2T and Refurbishment. Further Order for Milan 2T and Refurbishment is awaited.

In order to meet the enhanced requirement of Indian Armed Forces, BDL has augmented its production capacities and successfully fulfilled the requirements. In the process, BDL has invested considerably in creating world-class infrastructure, weapon system complexes, state of art facilities for manufacturing new generation weapons that envisioned to the needs of Indian Armed Forces.

Most of the orders of major products like Akash Weapon System will be executed by 2019-20, Invar ATGM and Konkurs-M ATGM will be executed by 2020-21 leaving the huge workforces without work. In cognizance with the facts stated above, BDL order position is not sustainable beyond year 2020-21.

GRSE: Value of production (VoP) for five FYs is appended below-

	(Rs. in crore)				
Financial Year	2016-17	2017-18	2018-19	2019-20	2020-21
Turnover	927.84	1345.52	1378.77	1425*	1440*

* MoU Very Good Targets

It is apparent from the table that there is a continuous increase in VoP with respect to GRSE since 2017-18. Balance Order position of GRSE as on 30 Sep 2019 is Rs. 27,406.91 Cr.

GSL: GSL is presently executing the 05 CGOPV project with balance executable order book of Rs 800 Cr which would get liquidated by 2020-21. GSL is in receipt of another order for two Missile Frigates which are in the initial stages of design. Further, GSL has received order for two LPG Cylinder Carrier Vessels and one Ferry Boat, which are in the different stages of

production. The order book presently stands at Rs. 15000 Cr including the aforesaid Shipbuilding & GES projects and Ship repairs.

Decline in VoP is due to interim low order book position as Project 1135.6 is at design stage, delay in finalization of Mine Counter Measure Vessels (MCMVs), for which GSL infrastructure is ready and delay in contract conclusion of Ministry of Home Affairs (MHA) boats. Notwithstanding this, GSL is making concerted efforts to secure short gestation projects in Domestic, Export, GES and Ship Repair segments, which will help in minimizing the potential impact due to lean executable orders to bridge the gap till the significant VoP contribution from Frigates and MCMV Projects. The action initiated by GSL to sustain the VoP growth rate is given below:

- ✓ **Absorption of Construction Technology for Composite Material.** Licensing Agreement for Transfer of Technology (LAToT) for Resin Film Infusion (RFI) and Process Monitoring of Vacuum Assisted Resin Transfer Moulding (VARTM) technology was exchanged between GSL and Research & Development Establishment (Engineers), Pune.
- ✓ **New Business lines** like Inland River Navigation, FRP Boats for export and Composite Components/Structures. Won order for construction of 03 nos 7.5T Static ahead Bollard Pull Tug Boats for Assam Inland Water Transport Development Society.
- ✓ **Thrust on Ship Repair** and expansion at Karwar.
- ✓ **Supply of high value equipment** for ships like Stern Gear, Fin stabilizer, Heli Grid and Sonar Domes.
- ✓ **Export Efforts.** GSL is approaching potential clients in friendly countries for GSL designed ships for export market. GSL has emerged L1 for Nigerian Navy for Landing Ship Tank, Training ship and Ship Design and Construction Center. GSL is putting concerted efforts for exporting various products (Ship, Simulators and GRP Boats) to friendly countries.

HSL: The VoP achieved during the last 5 years are given below:

(Rupees in Crore)

Year	Value of Production
2014-15	294.16
2015-16	593.29
2016-17	629.04
2017-18	644.78
2018-19	595.00

During the year 2017-18, HSL achieved a total income of Rs 651.67 core and a Value of Production of Rs 644.78 crore which have been the highest and the third best since inception of the company respectively.

The decrease in Value of Production during FY 2018-19 is mainly attributable to extremely low shipbuilding order book position of Rs 132.17 Cr as on 31 Mar 2018. However, with the signing of contracts for construction of 2 Nos. Diving Support Vessels worth Rs 2390 Cr and 4 Nos. 50 T BP Tugs worth Rs 260 Cr for Indian Navy in the end of FY 2018-19, the order book position of the shipyard has improved. These projects are at initial stages of construction and therefore a value of production of Rs 595 Cr could be achieved.

Recommendation No. 45

The Committee further note that the production in DPSUs mainly depends on the contractual quantities, established production capacity, certification of products, timely availability of raw material etc. They also have been apprised that the situation of decline in production in the DPSUs is going to improve due to materialization of some anticipated orders and initiation of new projects. HAL has submitted quotations against Request for Proposal (RFP) in March 2018 for supply of 83 Light Combat Aircraft (LCA) Mk1A and 15 Light Combat Helicopter (LCH) Limited Series Production (LSP). The LCH platform has attained Initial Operating Capability (IOC) for both Air Force and Army variants and is fully ready for operational induction awaiting orders. The Basic Trainer Aircraft, HTT-40 under development at HAL has demonstrated compliance to all Preliminary Services Qualitative Requirements (PSQR) and is moving closer to certification. Similarly, Light Utility Helicopter (LUH) has also completed major tests including the high altitude capability in hot and high Weather conditions in the Himalayas during trials and is also moving towards Operational Clearance. Two Do-228 civil certified aircraft have been manufactured and is available for supplies. HAL is expecting additional orders for ongoing programs like Advanced Light Helicopter(ALH); LCA, Hawk, Do-228 & Su-30 MKI and fresh production orders for new platforms like Do-228 Civil variant, LCH, HTT 40, LUH and Hawk-i. In GRSE, production in respect of the new projects of P17A, survey vessels and Anti-Submarine Warfare Shallow Water Craft (ASW SWCs) will be commencing in due course. Business Development Department of HSL has been created for market survey and submission of bids due to which HSL has turned around in securing orders in the competitive bidding process. The contracts for construction of 2 Nos. Diving Support Vessels worth Rs. 2390 cr and 4 Nos. 50 T Bollard Pull Tugs worth Rs. 260 cr for Indian Navy have been signed.

Reply of the Government

HAL: As brought out in the recommendation HAL has submitted quotations for supply of 15 LCH and 83 LCA Mk 1A. HAL is also pursuing additional orders for ongoing programs like Advanced Light Helicopter (ALH), Hawk, Do-228 & Su-30 MKI and fresh production orders for new platforms like Do-228 Civil variant, LCH, HTT 40, LUH and Hawk-i.

GRSE: At present, there are six projects under various stages of construction at GRSE. These projects constitute ships of strategic importance for Indian Navy and Indian Coast Guard. As on 01st Jan 2020, warships under various stages of construction are 01 No. Anti Submarine Warfare Corvette (ASWC), 01 No. Landing Craft Utility (LCU) ship, 02 Nos. Fast Patrol Vessel (FPV), 03 Nos. P-17A Advanced Stealth Frigate, 04 Nos. Survey Vessels – Large (SVL) and 08 Nos. Anti Submarine Warfare Shallow Water Crafts (ASW SWC). The deliveries of ships against 03 projects (ASWC, LCU & FPV) are tentatively scheduled to be

completed during FY 2019-20. The Contractual completion of all deliveries for P-17 A, ASW-SWC and SVL Projects is between Oct 2021 till Oct 2026.

HSL: In order to improve the order book position, Business Development Department of the Company has been created for market survey and submission of bids. As a result of this, HSL has turned around in securing orders in the competitive bidding process. HSL has emerged as the lowest bidder (L1) in the competitive tendering process for 4 tenders. All these contracts have been secured amidst stiff competition from sister public sector shipyards and Private shipyards.

During the FY 2018-19, HSL has signed two major shipbuilding contracts with Indian Navy i.e. 02 Nos Diving Support Vessel and 04 Nos 50 Ton BP Tugs worth Rs 2390 Cr and Rs 260 Cr respectively. Further, HSL has also signed contract for construction of 03 Nos Flap Gates at a cost of Rs 20 Cr with Naval Dockyard Visakhapatnam. These orders came in right time when the yard has a lean order book and have completed the delivery of most of the backlog shipbuilding orders. With this, the shipbuilding order book position of the company has increased to Rs 2689.10 Cr as on 31 Mar 19.

Further during FY 2019-20, the ship repair division of HSL has won refit orders worth Rs 150 Cr (approx.) for normal refits of INS Sutlej and INS Sujatha of Indian Navy through competitive bidding.

HSL has also been nominated by MoD for construction of 05 Nos. Fleet Support Ships (FSS) worth about Rs 9000 Cr for Indian Navy. The shipyard is in the process of finalization of design Collaborators for the FSS project and thereby conclude the contract with Indian Navy. Further, HSL is also nominated by MoD for construction of 02 Nos. Special Operation Vehicles (SOVs) also known as midget Submarines worth about Rs 2500 Cr for Indian Navy.

Recommendation No. 46

Keeping in view the above facts and weighing all pros and cons, the Committee in no uncertain words recommend that all-out steps should be taken to ensure that the initiatives taken by the DPSUs bear fruit and their order book position improves in the coming years. Here, it is pertinent to mention that the Ministry should extend all possible cooperation to the DPSUs in this regard. As the production in the DPSUs is majorly contingent upon the operational needs of the Forces, the Committee recommend that timely intimation and placement of orders by the Services, along-with necessary financial support from the Ministry of Defence wherever necessitated, must be provided to the DPSUs to arrest the decline in their production. They also desire that the DPSUs should also vigorously adopt and implement reasonable and effective cost-cutting measures to increase their sustainability. The concrete plans made to achieve such measures in a timely manner should be intimated to the Committee at the time of furnishing the Action Taken Replies.

Reply of the Government

Government is committed to the goal of achieving self-reliance in meeting national security objectives. The "Make in India" initiative is the focal point of the current defence procurement policy

and procedure and aims to promote indigenous design, development and manufacturing of defence equipment, platforms and systems, involving the public and private sector in the country. A new category of acquisition has been introduced in DDP- 2016- Buy Indian (IDDM), to promote indigenous design development and manufacturing. This category is the most preferred acquisition category and one rank above the "Buy (Indian)" category.

HAL: HAL has taken up the issue of order finalisation with all the relevant stakeholders at various levels and is constantly following up the matter to arrest the imminent decline in production due to lack of sufficient workload.

To increase sustainability and ensure cost competitiveness, suitable measures are in place at HAL. The company puts in concerted efforts to improve long term operational performance through supply chain optimisation in terms of increased outsourcing of all non-core activities, economies of scales through long term supply arrangements indigenisation of high value items. Improvement in process capabilities through six sigma, quality circles, lean, other interventions, productivity improvements through modernisation, labour productivity improvement through training, re-skilling & manpower optimisation have been progressed. However, aerospace industry being a highly technology intensive, there is great dependence on single suppliers/proprietary sources/foreign OEMs, Licensors for raw materials, LRUs, kits, spares etc, all of which make the cost optimisation efforts challenging.

BEL: BEL has a healthy Order Book of around Rs.54,900 Crs (as on 01.01.2020). It is pertinent to mention here that the deliveries of BEL's existing Order Book is spread over the next five years and the projects will be executed/delivered as per the timelines. Besides, BEL is making all efforts to further enhance the Order Book position through proactive Strategic & Marketing plans. Major orders such as Coastal Surveillance System Phase-II (Rs.1,537 Cr), Battle Field Surveillance Radar (Rs.265 Cr) etc., are in pipeline and are expected to be received in near future. However, few Units of BEL are not having sufficient workload in view of the lack of orders from customers. In this regard, Ministry may help in acquiring the orders.

As regards cost cutting measures, BEL adopts Cost Reduction Strategy with annual targets and reviewed periodically. Major avenues for Cost Reduction include Design Change & Innovation, Indigenization, Alternate Material, Outsourcing, Labour, Alternate Sourcing, Inventory Management, Process & Yield Improvement, Quality Initiatives, Negotiation etc. The company has in place a "Corporate Cost Reduction & Indigenization Committee" headed by Director (Marketing) for monitoring the progress and providing necessary guidelines to all SBUs/Units of BEL for implementation of Cost Reduction strategies & achieve desired results.

It is pertinent to mention here that, reducing wasteful expenditure is also one of the challenges of CPSE Conclave action points posed by Hon'ble Prime Minister and BEL is making all out efforts to further reduce the wasteful expenditure/cost on all front.

BEML: BEML has adopted various cost cutting measures in order to become sustainable. Some of the measures undertaken are as follows:

1. Manpower Rationalization

- ✓ The rationalization has been done through Multi Skilling, Redeployment & Outsourcing

- ✓ Fixed Term Employment
- 2. Financial Re-engineering**
 - ✓ Availing cost-effective loans, digital payments and improvement in receivables in terms of no. of days.
 - 3. Effective Procurement**
 - ✓ Reduction in single source and Proprietary items.
 - ✓ Material Cost reduction by increased vendor base and outsourcing
 - ✓ Inventory reduction
 - 4. Productivity Improvement**
 - ✓ Continuous Productivity Improvements thru Process re-engineering, Design change, Material optimization, etc. by all manufacturing divisions.
 - ✓ Reduction in Cost of quality thru Quality improvement projects viz. Quality Circle, Kaizen etc. resulting in Warranty expenditure reduction.
 - 5. Energy Savings**
 - ✓ Utilizing 75% of renewable energy for captive consumption generated thru Windmill and Solar Power plants established by the Company.
 - ✓ Reduction of Carbon footprint.
 - ✓ Replaced all its light fittings with LED Lighting at offices
 - ✓ Canteen waste used for Bio Gas Plant.
 - 6. Administrative Expenses & Others**
 - ✓ Ensured timely supply of equipment and spares avoiding LD
 - ✓ Controlling other expenses viz. Stationary, Travelling and Communication expenses.
 - ✓ Technology improvement towards Paperless office viz. implementation of File Life Cycle Management system, Online HR portal for Leave Application, Movement Pass, Salary Slips, Exit Management, Open Innovation Portal, Video Conferencing, etc.,
 - ✓ Hiring of Transport vehicles has resulted reduction in vehicle maintenance and manpower.
 - ✓ Rationalization of Regional / District Offices and Depots.
 - ✓ Complete Ban on Single Serve Plastic Bottles leading to environment conservation and savings in expenditure.

BDL: Increase in production from 2020-21 onwards depends upon timely placement of new orders on BDL to utilise its establishment capacity.

Following are the details of anticipated orders where BDL has submitted quotations:

- Akash SAM for 7 Sqd.: Negotiations with M/s BEL are in progress.
- Akash SAM for IAF: Negotiations concluded.
- MR SAM (IAF): PNC completed. As requested by OEM, price breakup also submitted.
- Akash SAM 1S: Quotation submitted in April 2019. Internal CNC and benchmarking is in progress.
- VSHORAD: CNC held between MoD and RoE in December 2019 is inconclusive. Next round of negotiation are scheduled in January 2020. The system put in place of BDL like

ERP implementation, e Bidding process, output based instinctive system and outsourcing of non-critical operations will ensure cost effective solutions to the customer (MoD). Further BDL adopted pricing policy in line with MoDs latest guidelines which will ensure reduction in procurement budget to MoD.

MIDHANI: Cost-cutting measures adopted by MIDHANI in 2019-20 are as follow:

- Four new reheating furnaces in Forge Shop were installed to reduce the energy consumption resulting in savings of about Rs 180 Lakhs
- Entered into Open Access agreement with TSSPDCL & TSTRANSCO to avail 4MW Solar power plant generated energy. About 10-12% of MIDHANI' annual power requirement will be met through the facility resulting in savings of about Rs 4-5 Cr/annum
- Dynamic reactive power compensation panels (01set) for 6000T Forge Press load centre were installed resulting in about 30% savings in 6000T Forge Press' energy cost
- High energy consuming equipment like 20T Arc Furnace is being operated in off-peak hours (22:00 hrs – 06.00 hrs) resulting in savings of about Rs 20,000/melt
- By using insulating hot top in Vacuum Induction Melting furnace around 3% yield has been improved in melting stage

MDL: MDL is readying itself for undertaking more work considering the fact that ongoing ship construction projects are expected to be completed in next 5 years. Anticipating completion of existing fabrication activities in next one year, MDL's Fabrication Workshops would be ready with spare capacity for new projects. Thus, MDL can immediately undertake construction of 4 more warships.

In the field of submarine construction, MDL can immediately undertake construction of 7 more submarines considering the fact that remaining 04 submarines of P75 are under advanced stages of construction/trials and are expected to be delivered by 2022. Also, the Pressure Hull Facilities, Structural Fabrication & Outfitting capability, Pipe fabrication facilities required for initial phase of submarine construction can be immediately assigned to new projects.

In view of above, MDL has undertaken following Strategies/measures to improve the order book position:

- i. MDL has initiated efforts for export, exploring diversification avenues, encouraging private sector participation, etc. MDL is gearing up for it by undertaking augmentation and modernization of construction facilities, acquisition of adjacent land, forming of JVs, transformation to latest technologies, etc.
- ii. Nhava Yard, close to the main facility, has been acquired by MDL with an intention for developing it into 'Green Field' Shipyard with requisite infrastructure/facilities for undertaking construction of Commercial vessels, Export orders and Repair/ Refit orders without disrupting production activities of IN orders in the main facility at Mumbai.
- iii. MDL is also in the process of acquisition of approx. 13 acres MbPT land adjacent to its existing facility. MbPT's wet basin is intended to be converted into Dry-docks for New builds & Refit/ Repair projects. Existing slipways in the said land can be used for construction of small vessels for Indian Navy and Coast Guard.

Apart from building frontline warships & conventional submarines, MDL is trying to penetrate other markets as well and some of our offerings are as follows:

- i. Refit & Repair of Ships & Submarines
- ii. Construction of Commercial/Merchant ships & offshore platforms like Multi-Support Vessels (MSVs), Offshore Supply Vessels (OSVs), Tugs, Dredgers, Ferries, Barges, Big Trawlers, Pontoons, Launches, Floating dry dock, Flat bottom river boats & fishing trawlers.
- iii. Auxiliary Naval Vessels like Offshore Patrol Vessels (OPVs), Security Vessels, Border Outposts, Cadet training ships, Missile Vessels, Vessels for Littoral combat & fast attack crafts.
- iv. Artificial Intelligence enabled Remotely Operated Vehicle (ROV)
- v. Tourist Submarines & Autonomous Underwater Vehicle.

Further, MDL has taken following cost cutting measures:-

- ✓ MDL is outsourcing most of its Non-core activities as an effective cost-cutting measures. Further, MDL is also moving towards Lean Management practices in the field of our production process to improve the overall efficiency.
- ✓ MDL is implementing new technological development in the field of shipbuilding like: integrated Module Construction method for the P17A Stealth Frigates project. It will result in overall deduction in production costs and less time for project completion.
- ✓ Due to the under-utilization of machineries and facilities, the overhead charges like: services & maintenance are not fully distributed on multiple projects. The overheads will be appropriately reduced, as and when MDL gets additional orders for warship / submarine projects. It will also result in reducing our production cost and increasing sustainability of MDL.

GRSE: GRSE continually endeavors with rigorous monitoring mechanism to reasonably and effectively implement cost-cutting measures to increase sustainability. Concerted efforts have been made for controlling the expenditure on Electricity Consumption, Advertisement/Publicity, Travelling expenses, Repair & Maintenance etc. The major Revenue Expenditure during the past FYs are tabulated below in this regard:-

(Rs. in crore)

Financial Year	2015-16	2016-17	2017-18	2018-19
Major Revenue Expenditure (Actual)	109	101	85.96	73.41

GSL: Austerity and Cost Reduction Measures adopted in GSL: Government of India has been constantly promulgating various notifications towards adoption of austerity measures for control over expenditure and maintaining financial propriety in all activities. Towards this, GSL has been consistently implementing measures for maintaining austerity in different areas of expenditure. Major areas where these measures have been adopted with very positive results

include Administrative Expenses, Labour expenses, Overhead, Overtime, Financial Management, Inventory control. The concrete plans made to achieve such measures is furnished in the Action Taken Report as attached as Annexure.

HSL: Idling of Submarine refit facilities of HSL:

MRLC of INS Sindhughosh at HSL. HSL has requisite capability, infrastructure & spare capacity for executing EKM class submarine refits. As part of capability enhancement, HSL has signed a comprehensive MoU with USBC of Russia to provide complete technical-logistics support for such works / refits / upgrades.

Various cost cutting measures adopted by HSL are enumerated below:

1. Rationalization of manpower: The existing organizational structures have been reviewed and rationalized with a view to make the system more efficient as well as effective. Consequent to restructuring of the functional divisions, human resource of various departments are being sized with right and suitable skill set & expertise to achieve the organizational goal. Downsizing/ rationalization of manpower has led to reduction in manpower cost. Retainers / consultants were dispensed. Strength of permanent employees and fixed term contract employees have been rationalized during the last three years. All the employees have been sensitized about “Minimize cost and Maximum output”. Employees benefits have been rationalized during the past few years and has resulted in:-
 - a) Payment towards salary & wages has been reduced from 137.21 Cr. In FY 2016-17 to Rs. 113.95 Cr in FY 2018-19.
 - b) Holiday working allowance of Rs. 1000/- day for officers has been withdrawn. Officers need to work on holidays and Sundays without any holiday working allowance.
 - c) Overtime expenditure has been reduced from Rs 2.45 Cr in FY 2016-17 to Rs. 0.18 Cr in FY 2018-19.
2. Savings in energy Cost through Solar Power. The shipyard is saving Rs 1.5 Cr per annum in energy costs through the installation of 03 MW capacity rooftop solar power system inside the shipyard premises. This is the largest rooftop solar plant in Andhra Pradesh installed at a single location. The entire project including design, supply, erection, testing, commissioning including warranty, operation & maintenance is being undertaken by M/s Clean Max without any operation and capital expenditure from the yard side. The project was executed under the Solar Energy Corporation of India (SECI) Rooftop Solar Scheme.
3. Usage of Dormant Stock: Usage of dormant stock has been increased from Rs. 1.25 Cr in FY 2017-18 to Rs 2.50 Crs in FY 2018-19.
4. Reverse Auction: Reverse Auction was implemented in HSL on 14 Feb 2017. Saving of Rs. 7.00 Cr (approx..) has been achieved so far through reverse auction.
5. Effective Inventory Management.

6. Savings through innovative methods in production processes: Certain innovative methods have been adopted in ongoing projects which resulted in savings in cost and time. Details of some of such projects are given below:-
- a) Innovative welding procedures: The earlier established welding procedure for joining CU-Ni (90/10) pipe to LG4C GM flange involves Brazing Process with silver brazing electrode grade BaCuAg 16A containing high % (43%) of silver (Ag) metal & the same was costing more than Rs. 25000/- per Kg, depending on the bullion rate prevailing on that date. HSL developed new welding technique to join CU-Ni piping with GM flange by Tungsten Inert Gas(TIG) welding process using a high melting point non-ferrous alloy with minimum silver content of 2% to economize the cost and the process approved by Indian Register Shipping (IRS). The major benefit achieved by adopting the new TIG welding process instead of existing Brazing Process is the reduction in cost of the filler material from over Rs. 25000/- to Rs 1,620/- per Kg. The cost benefit achieved during last 02 years on ongoing projects was to the tune of Rs 5 to 6 Crores and it will be accruing continuously. It is established that this innovative welding process is much stronger, superior and of higher quality than the existing brazing process. The process is easy for operation, user friendly and fast.
 - b) Design innovation of Bilge system in Fleet Support Vessel. HSL has saved an expenditure of nearly Rs 96 lakhs for bilge pumps/ system modification/ alterations. De-aerating tanks were fabricated in-house & control systems were modified with internal resources. Yard has spent a meager amount of 2 lakhs for re-designing and installing life into the existing design. Not even a single pipe length was modified, degouted and nearby machinery was unperturbed.
 - c) Innovative approach for Alignment of Main engine & Shafting on 10 Ton Tugs. The innovative approach of adopting “propulsion shafting system integration by using Laser assisted Alignment tool” in 10 T Tugs when in dry-dock condition enabled yard to achieve concurrent & multi-dimensional progress. A total of 3 months construction time period was saved for all these vessels and dry-dock period was optimized to its fullest extent.
7. Energy conservation measures. The following steps have been taken towards Energy Conservation which resulted in reduction in energy cost:-
- a) Use of APFC capacitor banks to improve the power factor thereby reducing the overall Power Consumption.
 - b) Running of heavy loads like Air compressors are restricted to minimum
 - c) Reduction of lighting to optimum level by using lighting management system and BMS.
 - d) Operation of Distribution Transformers around 70% loading by turning off during OFF peak hours
 - e) Switching off plant & machinery when not in use
 - f) Replacement of old switchgear & old PLCA cables with suitable capacity XLPE cables & new switchgear etc.
 - g) Replacement of old Air Conditioners with BEE certified star rated and inverter based units.
 - h) Replacement of centralized air conditioners with VRF/VRV air conditioning systems.
 - i) Replacement of old lighting fixtures with LED lamps.

- j) Replacement of old plant and machinery with efficient system like VVVF drivers and also installed VRD units for welding machines.

GSL has been adopting various cost reduction and austerity measures since the year 2014-15. These are achieved by implementing stricter control on expenditure including strict control on labour, overtime, prudent financial management, inventory procurement and control measures which are explained below:-

A. Policy Changes

- i. Reframing of Policy. GSL by adopting Medical Insurance Premium policy has substantially achieved the cost reduction objective as compared to the expenses incurred by following the policy of reimbursement of medical expenses over the years.
- ii. Savings in Labour Cost. GSL has applied strict control by deferring the filling of vacancies arising out of retirement /separation.
- iii. Reduction in Overtime Expenditure. The Company has consistently aimed at reducing the OT expenditure through effective control over engaging employees on limiting it to only the barest minimum in the production areas.

B. Inventory Control

- i. Material Procurement. Through stringent negotiations, higher priced discounts, introduction of new vendors for better competition and timely availability of materials has reduced the material cost compared to the estimates.
- ii. Alternative Use of Materials. Through economical and optimum use of material procurement for various projects, the Company made savings in material consumption and the inventory so saved after completion of each project has been reallocated to new jobs, thereby considering a reduction in inventory and material consumption could be achieved.
- iii. Scrap Disposal. Through competitive, efficient and faster scrap disposal, the Company achieved faster realisation of income from sale of scrap.

C. Financial Management

- i. Insurance Expenditure. Through rationalisation of insurance cover age and stringent negotiations, the Company could achieve savings in the insurance premium.
- ii. Interest Savings. Through better cash flow management and persistent follow-up, reduction in receivables resulting in saving in interest cost.

D. Administrative Measures

- i. Travelling Expenditure. Effective control of TY Duty journeys could bring reduction in TY Duty expenditure.
- ii. Other Administrative expenditure.
 - a. There has been consistent efforts in reduction of Administrative Expenses such as Advertisement & Publicity, Printing and Stationery, Business promotion expenditure etc.
 - b. Measures have been taken to conduct more in-house training programmes, reduced deputation of employees for outstation training/seminars.

GOA SHIPYARD LIMITED
SAVINGS ON ACCOUNT OF AUSTERITY MEASURES IN 2018-19

SI No:	Particulars	2017-18	2018-19	Changes over 2017-18 (Rs in crore.)	Increase/ Decrease wrt to FY 2017-18	Remarks
A	Value of Production	1,342.67	847.80			
B	Savings					
i.	Material Cost	585.68	328.83			
	Material Cost as % of VOP	43.62%	38.79%	40.95	4.83%	Savings @ 4.83% (43.62-38.79) on VoP
ii.	Manpower Cost					
a.	Salary & Wages	175.41	155.19	20.22		
b.	Overtime	13.23	8.08			
	Overtime as % of VOP	0.99%	0.95%	0.34	0.04%	Savings @ 0.04% (0.99-0.95) on VoP
	Total(ii a+ ii b)			20.56		
iii.	Overheads					
a.	Travelling Expenses	3.02	2.33	0.69		
b.	Business Promotion Expenses	2.36	1.81	0.55		
c.	Employee Welfare Expenses	11.37	12.63	-1.26		
d.	Repair & Maintenance	21.03	17.79	3.24		
e.	Office Stationary& Equipment	0.26	0.26	-		
f.	Others	37.32	42.71	-5.39		
	Total of (iii a to iii f)	38.04	34.82	-2.17		
iv.	Outsourcing	119.65	92.71			
	Outsourcing cost as % of VOP	8.91%	10.94%	-17.21	-2.03%	
v.	Energy Cost	4.36	3.24			
	Energy Cost as % of VOP	0.32%	0.38%	-0.51	-0.06%	

vi.	Inventory					
a.	Disposal of Scrap	5.74	2.59	-3.15		
b.	Reduction in inventory holding					
	Average Inventory X Average Interest Rate	19.43	5.70	13.73		
	Total of (vi a to vi b)			10.58		
vii.	Others			-		
C	Total Savings (i+ii+iii+iv+v+vi)			52.20		

Overall achievement in Cost Reduction during FY 2018-19 is Rs 52.20 Cr in comparison with FY 2017-18.

Inadequate capacity utilisation and Defence Exports

Recommendation No. 47

During deliberations of the Committee on examination of Demands for grants 2019-20, it was candidly admitted by the Defence Secretary that the DPSUs were not working to their capacity. The Committee have learnt that as on date, the turnover of the DPSUs is around Rs. 65,000 crore, whereas the total defence procurement in the country is around Rs. 85,000 crore. However, the speed of growth of the potential of the DPSUs is going to outrun that of the demands of our Defence Sector. The Committee note that this challenge can be met by the DPSUs by creating assets for 'blue water' economy and by increasing defence exports. Undoubtedly, the increase in defence exports would accrue immense economic and diplomatic benefits to our country. The Committee appreciate such an admission by the Defence Secretary, nevertheless they would like to know about the blueprint in detail, if any, and whether the same is under preparation or initiation to follow the trajectory as brought by the Defence Secretary.

Reply of the Government

HAL: Presently HAL's Exportable Platforms are Advanced Light Helicopter (ALH) MK-III– Dhruv and Do-228 aircraft. In the rotary wing side ALH-Mk-IV & Light Combat Helicopter (LCH) and in the fixed wing segment Light Combat Aircraft (LCA)-Tejas have been added to the basket of HAL's exportable Aircraft Platforms. In the near future, Hindustan Turbo Trainer (HTT)-40 and Light Utility Helicopter (LUH) will also be pitched for export market.

With the introduction of above Platforms to Export Market, HAL envisages the enhancement in Exports in the coming years. Apart from platforms, HAL has proven capabilities in design, development and manufacturing of accessories, avionics, other work packages such as metallic/composite structures, rolled rings etc. The export opportunities for these products are also being pursued.

Following are the efforts being initiated by HAL towards significant enhancement in Exports:

(a) **Export Strategy:**

HAL has drawn an elaborate Export strategy with the approval of Board. Market study has been done to identify the Target Countries for export of HAL Products & Services. HAL Aircraft Platforms are mapped with Target Countries based on Countries' Aging Aircraft fleet, Acquisition Plan, Military Budget, G-2-G Bilateral relationship, Threat perception & Civil requirements and past & ongoing interactions.

(b) **Interaction with Defence Attaches / Missions:**

Regular interactions with the Defence Attaches / Indian Missions in the target countries have been initiated and towards this, letters with promotional materials such as Product Brochures have been delivered to all the Target Countries.

Interactive sessions with Foreign Defence Attaches / Foreign Missions have been conducted in three different sessions starting from 13 May'19 followed by 08 Jul'19 and 16 Sep'19 in order to establish rapport and formal network for gathering Business Intelligence such as the Defence Procurement ethos/Registration procedure in these Countries, requirement of local agents etc.

(c) **Appointment of Marketing Agents Abroad:**

Based on the inputs gathered from the Mission, it is envisaged that Marketing Agents are required in certain target countries to promote HAL's Products & Services. Presently, HAL is having Marketing Agents in Countries like Nepal, Malaysia (2), Indonesia, Vietnam, Suriname, Nigeria and Thailand.

HAL Board has accorded approval on introduction of additional Marketing Channels namely; Distributors and Business Development Consultants for reaching out to more prospective Customers. The appointment of Marketing Agent/Distributors/Business Development Consultants for Export business in other target Countries are in process.

(d) **Foreign Supplier Registration:**

In order to receive RFI/RFPs directly on ongoing basis, HAL as on today has registered in Defence Procurement Portal of Target Countries namely Nepal, Philippines, Singapore, Netherlands and UK.

(e) **Export through G-2-G route:**

Export opportunity is also being pursued through Indian Govt channel in Sri Lanka, Nigeria and Nepal which follows G-to-G route for platforms namely Do-228 and ALH. The effort includes export utilizing Line of Credit.

(f) **Offsets:**

HAL has been exploring with OEMs to leverage offset business opportunities against Defence Offsets arising out of Indian MoD Contracts/programs as per applicable DPP and Civil Offset against purchase of Civil Aircraft. HAL has also been leveraging Offset business opportunities arising out of HAL's own procurements. HAL has signed IoPs / NDAs/ MoUs for offset business related to Indian Defence programs with major OEMs. HAL has been facilitating OEMs in liquidating Offsets as Indian Offset Partners for Global OEM's such as: Airbus, Boeing, Rosoboron export, RAC-MiG, IAI, Rafael, Elbit etc.,

(g) **Branding & Promotion:**

As part of Brand building and Promotion for reaching out to prospective customers, HAL has participated in 9 International Exhibitions during FY 2018-19 as against 2-3 Exhibitions per FY in the past. In 2019-20, HAL participated in Paris Air Show-2019, MAKS 2019-Russia, and Dubai Air Show 2019 and will be participating in Defexpo-2020.

As a result of these efforts, HAL is having various Export Business leads which are being pursued to enhance Export sales.

The following instances show the increasing recognition of Indian Defence Platforms in the Global market:

- a. The LCA, Tejas was shortlisted by RMAF Malaysia for issue of RFI to HAL. Accordingly RFI was received and responded in Feb 2019. Formal RFP is expected within 1st quarter 2020.
- b. Australia has issued RFI to HAL in Aug 2019 for procurement of Combat Helicopters, considering the features of LCH (Light Combat Helicopter). Response to RFI was submitted.

BEL: Efforts being put by BEL to increase the exports are detailed below:

BEL has a dedicated International marketing Division for providing an increased thrust for harnessing the export potential of BEL Products, systems & capabilities. BEL has identified the key market segments for exports and has a structured market plan. BEL is actively involved in the process to generate & pursue business leads and provide innovative cost effective solutions to the customers. BEL has adopted the following strategies to increase its business share in global arena:

- Strategically opened Overseas Marketing Offices at six locations in Indian Ocean Region, Middle East Region and America.

- Approach more Companies/Integrators/OEMs to be their global Supply Chain Partner.
- Identify representative/partner to enter new markets & maximize global reach.
- Closely working & collaborating with various major Foreign Aerospace & Defence Companies to meet their Offset obligations in various RFPs of MoD, India on account of offset policy incorporated in Defence Procurement Procedure (DPP).
- Established strategic alliance with Indian & Overseas Platform Manufacturers /Integrators/Shipyards to jointly look out for export opportunities by offering proven indigenous products/solutions.
- Increased frequency to visit/invite/interact with key customers/partners for in-depth understanding of their requirements, acquisition process and to establish long-term customer relationship for enhancing export business.
- Continuously in touch with Indian Embassies/High Commissions abroad & Foreign Embassies in India to identify and explore/tap more business.
- Increased thrust for quick innovation and keeping the process in place for future too for its product/solutions as per the ever-evolving global requirement.
- Efforts towards participating in Government tenders in foreign countries.
- Regularly interact with Ministry of External Affairs, India for supply of products/systems under Line of Credit (LoC)/Grants to friendly countries to India.
- Apart from Defence products, BEL is also exploring market in developing & third world countries for civil products like Solar Power Generation, Smart Cities, etc.
- BEL has also started to look for generating business in the field of turnkey solutions based on its software capabilities and Artificial Intelligence under secure environment.
- Participate in 3 to 4 International exhibitions every year.

BEML: During the year 2018-19, BEML has recorded highest sales of Rs. 3481 crore. Out of this, 87% of business was through orders obtained through global competition with MNCs viz. Caterpillar, Komatsu, Alstom, Bombardier, CRRC, etc.

The Company has its own world-class composite R&D establishment for Design & Development of products. The R&D establishment has CAD Centre, Fluid-power, Powerline, Structural Engineering & Material Science laboratories and is continuously engaged in New Product Development and Upgradation of existing products to meet customer requirements. The R&D expenditure is around 2 ~ 3% of its turnover. Over 65% of sales turnover is thru in-house R&D developed products.

BEML has given major thrust to Self-Reliance and already achieved indigenization levels of over 90% in the mainline Mining & Construction products, Rail coaches & EMU's, over 80% in High Mobility Vehicles (HMV) and over 60% in Metro cars. Further efforts are underway to reach higher levels.

The Company has launched "Make In India" Products 150T & 190T Dump Trucks and 180T Electrical Excavator successfully. These biggest electric drive dump trucks were designed and manufactured for the first time in India and are major import substitution products for the Mining sector. After successful trials, Company have received orders for 5 numbers of 180T Electrical Excavators. Further orders are in the pipeline for 150T & 190T high end dumpers.

In-house Designed and Developed Arjun Armoured Repair & Recovery Vehicle is presently under trials and further orders are expected which will result in FE savings for the country. The Company is also working with industry partners to leverage technology for the benefit of customers such as introducing AI features in machines. Towards protecting the Intellectual property of the Company, the innovation cell has succeeded in filing 65 patents covering innovations in product design, manufacturing and operations.

The Company is also working towards 'ZERO IMPORT' policy of GoI and has released EoI for all Imported items for localization. To boost indigenous content, BEML has plans to enter into JV with renowned MNCs for local production of defence spares, aggregates, cabin, high value metro car aggregates. BEML is working with ISRO for GPS based speedometers, tapping satellite signals Navigation and tracking of equipment thru AI features.

On export front, during 2018-19, the Company has exported goods & services to the tune of Rs.19.49 crore as against Rs.28.53 crore during the previous year. Exports were low due to delay in finalisation of tenders by customers including GoI Line of Credit (LoC) projects and geo-political disturbances in Middle East & North Africa (MENA) region which is the focus territory for BEML.

For improving the geo-strategic reach and increasing exports, BEML is working on various business opportunities in Defence, Mining & Construction and Rail & Metro segments in SAARC and Africa.

Followings are the strategies adopted to enhance BEML's export business:

1. Widening BEML's Distributor Network in addition to direct sales
2. Brand building and visibility through Exhibitions and seminars
3. Collaboration with other DPSUs/ Indian companies
4. Joint Ventures in India or with local firms in abroad
5. Utilizing EXIM bank opportunities – Through Indian Lines of Credit
6. Through Chambers of Commerce / Embassies / Defence Attaches

BDL: BDL has proved itself and achieved turnover of Rs.4887 Core & Rs. 4588 Crore in 2016-17 and 2017-18 respectively. Reason – same repeat as in 44??

During 2016-17 and 2017-18, BDL has utilised full capacity to produce Akash Surface to Air Missile and Milan 2T ATGM.

Export: A part from regular supplies to Indian Armed Forces, BDL is also exporting Torpedoes to friendly neighbouring countries. Ministry is encouraging exports in a big way by issuing SOP on exports, ease of license to export. BDL has bagged 4 export orders out of received, BDL has executed one order and balance three orders will be executed in 2020-21.

Capacity enhancement by modernisation will be helpful for further export. For achieving exports, BDL has regular interaction with the overseas customers. Offset implementation also offers a major opportunity to achieve export targets. BDL is interacting with aero-space majors in Europe and Russia to exploit opportunities arising out of offsets. BDL has given trust on Export of Weapon Systems. A Team of experts has been visiting friendly countries and briefing about our products.

MIDHANI:

Inadequate capacity utilization and Defence Exports: MIDHANI has been fully utilizing its capacity towards manufacture of Special alloys. Last 3 years capacity details are given below.

Details	2016-17	2017-18	2018-19
Installed Capacity (MT)	5550	5550	5550
Physical Production (MT)	6891	6030	6846
Capacity Utilization (%)	124.16	108.60	123.30

MIDHANI focuses on export of Titanium, Super alloy based products. In FY 19-20, about Rs 8 Cr. export sales has been achieved (including Rs 2 Cr. deemed exports). In FY 19-20, the following steps have been taken by MIDHANI to improve exports:

- NADCAP certification is under process to target global aerospace market
- MIDHANI registered as a Vendor in EGYPT Defense Production Unit - HELWAN ENGINEERING INDUSTRIES COMPANY.
- UNIPOL has approved MIDHANI as a Global Supplier for Turbo Charger Application used as one of the important components in automobile industry.

MDL: Every defence ship and submarine construction project is unique due to customer specific requirements and their strategies. These projects are long gestation projects. Shipyards have to collaborate with the customer in detailed designing which requires 1-2 years. Thereafter, production commences and achieving of turnover starts.

Currently, MDL's turnover is rising year on year. The ongoing ship construction projects are expected to be completed in next 5 years and balance 4 submarines being in advanced stage of construction are expected to be delivered by 2022.

With an intention of increasing the turnover, MDL is also putting in efforts for bagging export order. MDL has put in following efforts to enter the export market-

- Global Export Participation

	Projects	Vessels	Countries	Agents
RFI Response	16	105	5	2
RFP Response	7	12	6	6
Total	23	117		

- Agency Agreement signed for following Countries:
 - Egypt, Israel, Middle East, Myanmar, Ghana, Nigeria, Sierra Leone, Niger, Liberia, Philippines
 - Communication in progress with Thailand
- Participation in Trade shows/ Exhibitions:
 - International Military Technical Forum, Russia from 21-26 Aug 18
 - Euro Naval, Paris from 23-26 Nov 18
 - EDEX, Cairo from 02-05 Dec 18
 - Langkawi International Marine and Aerospace Exhibition(LIMA), Malaysia from 26-30 Mar 19
 - ISDEF 2019, Israel, Jun 19
 - IMDEC 2019, Accra Ghana, Jul 19
 - DSEI 2019, UK, Sep 19
 - DSEI 2019, Japan, Nov 19
- Already approached Indian Embassies, High Commissions located in several countries
- Challenges in Export-
 - In most of the target countries, there is deep rooted Chinese presence with a very competitive price tag and build timelines. In a number of instances MDL lost orders to China
 - The hidden subsidies by the Chinese govt. to the shipbuilders enable them to cut the prices drastically. Chinese Shipbuilding Industry is fostered by the following:
 - Steel subsidy
 - Energy subsidy
 - In case an owner cancels the orders, the govt. takes the responsibility
 - Maritime clusters and SEZ for ancillary Industry
 - Lease free land for 50 years for shipbuilding activity
 - Funding options for Chinese companies are attractive vis-à-vis what EXIM can offer us in India e.g. In Deck Carrier project for a German client, the Chinese price was 20-30% cheaper for identical equipment.
 - For a number of instances MDL requires to enter into a JV with local companies of the importing country and is specific to the tenders for a potential project. MDL is willing to execute JV, there is no lead time available in the tender timelines for formulation of a JV. This is a long drawn procedure for DPSU in India
 - Ships / Submarine are built to tailor made specifications, involve multitude of components, interaction with multiple agencies
 - Long gestation period of 2-5 years depending upon the type of the vessel.
 - Ships / Submarine production cannot be compared with items manufactured by mass production with standard specifications in high volumes with a manufacturing cycle of days or weeks.
 - Finalizing of an export order, signing of contract, design of the vessel/ship with the customers, production, trials and handing over of the vessel to the customer involves long gestation period. The duration from signing of contract till commencement of

production may extend from 6 to 18 months depending upon the type, nature/class of the vessel and its purpose/application.

Steps Taken for Creating assets for the Blue Water Economy.

Submarine Launch Facility: A submarine launch facility is being created to facilitate load out/launch of fully constructed Submarine in the Submarine Assembly Workshop at Alcock Yard. On completion of the project, the launching of Submarines can be done independent of dry dock. The project comprises of

- i) Hard Stand of the area in front of the Workshop up to the Quay Wall
- ii) Fabrication of Lifting Beams
- iii) Construction of a Floating Dry Dock (FDD)

The Submarines constructed will be transported out of the Workshop with the help of Lifting Beams and SPMTs and loaded on to the Floating Dry Dock. The Submarine loaded on to the FDD will then be taken to deep waters in the harbor and made afloat.

Proposed Steps for creating assets for the Blue Water Economy.

During 2020-2030, MDL intends to create new assets and modernize existing assets with a CAPEX of approximately 2000 Cr.

- a) Nhava Yard, close to the main facility, will be developed into a 'Green Field' Shipyard with requisite infrastructure/facilities for undertaking construction of Commercial vessels, Export orders and Repair/ Refit orders without disrupting production activities of IN orders in the main facility at Mumbai.
- b) Further, Modernization will include replacement of Cranes, extension of slipways and renewal of existing infrastructure. These will help MDL to accommodate vessels of larger dimensions and build Next Generation Destroyer for the Indian Navy. It will also cater for construction and repairs of large warships and commercial vessels.

GRSE: The shipyard has recently completed its Modernisation with an aim to build quality ships in reduced timeframe with Modular Construction Technology. Post major modernization and infrastructural augmentation, GRSE now can construct 20 ships (i.e. 08 large ships & 12 small ships) concurrently. This includes construction of 04 Nos. Large Ship & 05 Nos. Small Ship at Pre-Launching stage and 04 Nos. Large Ship & 07 Nos. Small Ship at Post-Launching stage. Presently, GRSE has the order for construction of 19 warships. Upgradation of facilities of Raja Bagan Dock (RBD) unit of the company is underway. On completion of this upgradation by 2021, the shipbuilding capacity will increase from 20 to 24 ships concurrently. For continually utilizing the augmented capacity in future, GRSE has responded to RFPs of Indian Navy, Indian Coast Guard and Indian Army for construction of around 30 Ships. In line with MoD thrust on Defence Exports, GRSE is exploring opportunities to grab a few export orders for the warships it is capable of constructing.

GRSE successfully developed an array of world-class platforms including Frigates, Missile Corvettes, Survey Vessels, Marine Acoustic Research Ship, Anti-Submarine Warfare Corvettes, Landing Ship Tanks (Large), Fleet Tanker, Water-Jet Fast Attack Crafts, Inshore Patrol Vessel and the Landing Craft Utility, Hovercrafts and also the First Export Warship, an

Offshore Patrol Vessel to Mauritius. So far GRSE has constructed and delivered 103 such warships and amphibious ships of strategic importance. All these Warships are armed with high-tech infrastructure.

The company in the past has also designed, constructed and supplied 680 other vessels and Crafts like Bulk Carriers, Passenger Ferries, Tugs, Towing Vessels, Seaward Defence Boats, Fast Interceptor Boats, Dredgers, Fishing Trawlers, Motor cutter, RO-RO Ferries etc.

GRSE's role and proposals with regard to creation of assets for the Blue Water Economy are given below:-

- (i) GRSE can supply Trawler, Barge, Pontoon, Tug etc for Incentivising Deep Sea Fishing to achieve its full potential.
- (ii) GRSE can supply Survey Vessel and Marine Acoustic Research Ship (MARS) for Potential Fishing Zone Advisories as a service to IORA (Indian Ocean Rim Association) countries.
- (iii) Trawler, Barge, Pontoon, Tug, Offshore Patrol Vessels can be supplied by GRSE for Increase Deep Sea Fishing.
- (iv) Survey Vessel, Marine Acoustic & Research Ship (MARS), Offshore Patrol Vessel of appropriate payloads can be supplied by GRSE for Offshore Oil & Gas extraction & Extraction of Minerals from areas allocated by International Seabed Authority on a commercially viable basis.
- (v) GRSE can provide Bulk Carriers, Passenger Ferries, Barge, Pontoon, Tug, Offshore Patrol Vessel for Short Sea Shipping.
- (vi) To support creation of Coastal Economic Zones, GRSE can supply Passenger Ferries, Hovercrafts, Boats, Barge, Pontoon, Tug and Inshore Patrol Vessel for operations at CEZ. Further, setting up of repair facility for such ships could be considered.
- (vii) Appropriate vessels for the activity can be designed & built by GRSE as per specifications to commercialise ocean debris collection and offer support to small island states.

Under favourable business conditions the company could explore domestic orders for building other ships as required for promoting 'India's Blue Economy for National Prosperity'.

GSL: GSL is striving to increase the export turnover and GSL's roadmap for export plan for next five years is given below:-

Financial Year	2019-20	2020-21	2021-22	2022-23	2023-24
Exports (Rs. crore)	31*	130**	300**	300**	300 [#]

FY 2019-20:

* Export figure for FY 2019-20 includes the following:

- ✓ INR 29.16 Cr received in respect of Offshore Patrol Vessels delivered to Sri Lanka Navy.
- ✓ Training services to Oman Navy: INR 15 lacs.

- ✓ Supply of services to Wartsila: INR 71 lacs.
- ✓ Bid submitted for supply of Heligrad to Saudi firm.

FY 2020-21 to 2022-23:

** Export figure for FY 2020-21 to 2022-23 includes the following:

- ✓ Proposal for construction and delivery of Landing Ship Tank and Cadet Training Ship for Nigerian Navy is expected to be finalised by 2020-21. LOC is approved by MEA. Cabinet approval is awaited from Nigerian side.
- ✓ Training to Myanmar Navy.

FY 2023-24:

Expected RFP for 06 OPVs/02 Corvettes program for Philippine Navy.

- In order to increase export revenue, GSL has submitted the proposals to various countries viz. Philippines, Portugal, Saudi Arabia, Myanmar, Egypt, Bangladesh, Kenya, Sri Lanka, West Africa for design and construction of different variants of vessels/platforms. Response is awaited from the above countries.
- GSL has registered as an Exhibitor in DEFEXPO-2020 & participating in various exhibitions and showcasing its product range and advance technological capability to increase the export turnover.

GSL's input on Blue Water Economy:-

1. Shipbuilding is the backbone of blue water economy providing seafaring platforms for optimal utilisation of marine resources and complementing the revenue earning sources of the State. GSL being one the major shipbuilders in the country, has been a devout provider of various kinds of vessels, systems and related marine products. These include the following:-

- a. Patrol vessels, interceptor crafts, fast attack crafts, boats for maritime security of territorial waters. The same is essential to secure the shipping lines in the Indian waters and provide secure environment for gainful utilisation of marine resources.
- b. Survey vessels have been designed and constructed indigenously for the Indian Navy, which have successfully undertaken survey of the Indian waters, providing valuable navigational and exploratory aid in the region.
- c. Fishing exploratory vessels have been provided to fisheries research institute which have provided valuable research in fishing activities in the Indian waters and optimised efforts in fishing.
- d. Regular repairs have been undertaken for the defence as well as commercial seafaring platforms. This has resulted in maintaining sound health of vessels and optimal performance at sea.
- e. Active participation in the Sagarmala initiative of the GoI wherein GSL has shown keen interest in design and construction of river cargo and passenger vessels for the Project. The Shipyard is presently constructing a ferry for the Varanasi terminal and likely to be delivered shortly. Also Tugs are being constructed for Assam Govt for operation in the Brahmaputra river.

The Shipyard is looking forward for active participation in the future construction programs of the Project.

f. Passenger vessels have been provided to Andaman and Nicobar Administration, which have been a boon in terms of transportation of men and material in the far off Islands.

g. LPG carriers are being constructed for Lakshadweep Islands.

h. A total of 38 deliveries have been made various foreign countries, thereby contributing to the exports.

2. **Future Plans**. The Shipyard will strive to optimally use the waterfront for following activities in the future:-

a. Exploratory vessels for research and exploration, which is essential to harness the marine resources. These also include polar research vessels for exploration by Indian research agencies in the harsh Polar Regions.

b. Unmanned and intelligent platforms for aid in the security, exploration and extraction of marine resources.

c. Plan to explore opportunities in commercial shipbuilding for cargo as well as passenger segment.

d. Continue to provide high end platforms equipped with modern systems for maintaining security and peace in Indian waters and facilitating peaceful atmosphere for exploitation of marine resources.

HSL: HSL is a green-field shipyard on the eastern coast, having capability to construct and repair all kinds of ships and submarines. It is pertinent to mention that HSL has completed all the legacy projects (13 Nos) pending since 2010 during the last four years. HSL has recently turned around and started making profits. However, following issues are hindering the performance of the shipyard:-

(a) Ineligibility to participate in international tenders. HSL is ineligible to participate in international tenders and execute export orders due to its negative net worth. Despite strong growth momentum and after having posted operating and net profits for the past four consecutive years, the shipyard's negative net worth resulting from legacy issues is yet to be completely neutralized. Although the yard's negative net worth has been improved from over Rs 1000 Cr to less than Rs 600 Cr, it has been an impediment in participating in tenders for export orders. The Shipyard has submitted a proposal for Revised Financial Restructuring with Nil cash outflow to GoI and requested approval of MoD which will help the yard to attain positive net worth and participate in international tenders.

(b) Ineligibility to participate in certain domestic tenders. Defence Procurement Policy (DPP) 2016 has been amended by including Financial Assessment parameters (CAT F1 to CAT F5) as Annexure II to Appendix C to Chapter IV and Appendix O to Schedule I of Chapter IV. With the proposed rating criteria the Shipyard is eligible to participate only in

CAT F3 and is ineligible to participate in CAT F1 & F2 due to stipulated credit rating 'A'. RBI approved rating agency ICRA has assigned [ICRA] BBB+ to HSL. The relatively low credit rating is mainly due to negative net worth and legacy liabilities. Despite having one of the best operating parameters and infrastructure, HSL does not meet the eligibility criteria due to its legacy liabilities. The financial restructuring proposal with NIL cash outflow to GOI to enable shipyard to achieve positive net worth is under active consideration of MoD, which will improve HSL's credit rating. In the interim, it is requested that the minimum financial eligibility credit rating for CAT F1 & CAT F2 be amended to 'BBB' to enable HSL to participate in forth coming RFPs viz Next generation OPVs (08 Nos) and Next generation corvettes (07 Nos) till approval of financial restructuring proposal of HSL.

Recommendations No. 48

The Committee note that the value of exports from DPSUs in 2018-19 was Rs. 393.29 crore. The steps taken by the Ministry of Defence to promote defence exports include setting up of export promotion cell, expansion of role of Defence Attaches and creation of export action plans and strategies for all DPSUs and Ordnance Factories Board (OFB). The Committee agree with the views expressed by the Defence Secretary during his deposition that unlike earlier, the DPSUs have to provide specific attention towards exports while increasing their capabilities. The Committee understand that this is a gargantuan task as our DPSUs would have to compete with big players in the international market such as USA, Israel, Russia, etc. This would invariably require the DPSUs to possess sound financial profile, state-of-the-art Research & Development, avantgarde technology and infrastructure, reputation for timely delivery of products, collaboration with premier research agencies such as ISRO, focus on indigenization etc. Therefore, they urge that concrete and concerted efforts be made by all the stakeholders i.e. DPSUs, the Ministry of Defence, the Forces, OFB etc., to carve a niche for India as a formidable force in Defence exports and 'blue water' economy.

In regard to the figures of value of Defence exports supplied by the Ministry, the Committee would like to know why the value has gone down in the year 2018-19 in the exports of GSL, BEL and BEML. They would also like to know why this value has dipped to meagre Rs.14.54 crore in GSL in comparison of Rs. 67.20 crore in year 2017-18.

Reply of the Government

BEL: The value of defence exports for the last three years is tabulated below:

Name of the PSU	2016-17	2017-18	2018-19
Defence Export (Rs.Crs)	360	167	150

BEL has been giving an increased thrust towards harnessing the export potential of defence electronics products & systems. BEL has been exporting various products / systems to various friendly countries. Apart from this BEL is interacting with electoral commissioners of various democratic countries to market Electronic Voting Machines. Having successfully established Coastal Surveillance System (CSS) for few neighbouring countries, BEL is

interacting with Ministry of External Affairs on a regular basis for supply of CSS to other friendly countries of India.

BEL is focusing on the various opportunities to meet OEM's offset obligations in various RFPs of Indian, MoD. In this regard, BEL is closely working with various foreign Aerospace & Defence Companies. Further, efforts are being made to establish long term supply chain relationship with global players.

The decline in export sale is mainly due to the non-establishment of Letter of Credit (LC) by customer for various Naval Systems, Offshore Patrol Vessels etc. The transformation in political & economic scenarios in Myanmar, Sri Lanka and Maldives was another factor contributing to reduced exports.

The past 5-6 years' trend indicates that the Defence exports performance of Domestic Public & Private Defence industry has improved significantly, in terms of value. The rise in exports is attributable to Streamlining of licensing procedure & speeding up the process of grant of NOC for exports. However, as compared to major developed countries, the Defence exports is still low in terms of value & volume and the following are the real time challenges faced:

- BEL has been extensively pursuing to promote products in African Region. It is observed that plenty of the business opportunities are on hold due to lack of budget/ fund at customer side.
- The acquisition of Defence & Civilian products from Indian Industry is not materializing due to slow decision making process of various foreign Governments such as African & South East Asian (SEA) Region.
- Majority of the BEL products are evolved & developed for the end use of Indian Defence Forces. As part of the NOC proceedings for export of products & systems, BEL is directed by the Indian stakeholders (Army, Navy, Air Force, DRDO, MEA) to change the frequency/algorithm and dilute the specifications which in turn results in non-conformity to the foreign customer's requirements. Often, the time available to derive an alternate product/system is very limited and eventually there is a loss of business opportunity.
- It is learnt that Defence deals pertaining to SEA Region are largely through local Agent who expects BEL to pay a high Agency Commission. As per the RBI Guidelines, exporter can pay maximum 12.5% of total contract value as Agency Commission. In view of this, BEL withdraws the pursuance of the business opportunity.
- Naval segment business is one of the Core Competencies of BEL. While Indian Shipyard Manufacture Platforms, BEL delivers & integrates the On-board Sensors & Weapon System to cater to the market in the countries of Indian Ocean Region. However, it is learnt that competitor countries propose to construct Shipyard right from scratch, ToT for manufacturing Vessels and Commission the Vessel for the requirement of Navy backed by attractive terms of funding by them. This is one of the emerging challenges for Indian Defence players.

- Stiff Competition from US, Europe, Israel and China in terms of products, services, Funding and Quality.
- Increase of the offset threshold limit from Rs.300 Cr to Rs. 2,000 Cr has resulted in OEMs successfully evading offset obligations for various projects. Given that only a handful of projects cross this increased threshold, it is a challenge for Indian Offset Partners to capture the offset business for exports.

BEML: During the year 2018-19, BEML has recorded highest sales of Rs. 3481 crore. Out of this, 87% of business was through orders obtained through global competition with MNCs viz. Caterpillar, Komatsu, Alstom, Bombardier, CRRC, etc.

The Company has its own world-class composite R&D establishment for Design & Development of products. The R&D establishment has CAD Centre, Fluid-power, Powerline, Structural Engineering & Material Science laboratories and is continuously engaged in New Product Development and Upgradation of existing products to meet customer requirements. The R&D expenditure is around 2 ~ 3% of its turnover. Over 65% of sales turnover is thru in-house R&D developed products.

BEML has given major thrust to Self-Reliance and already achieved indigenization levels of over 90% in the mainline Mining & Construction products, Rail coaches & EMU's, over 80% in High Mobility Vehicles (HMV) and over 60% in Metro cars. Further efforts are underway to reach higher levels.

The Company has launched "Make In India" Products 150T & 190T Dump Trucks and 180T Electrical Excavator successfully. These biggest electric drive dump trucks were designed and manufactured for the first time in India and are major import substitution products for the Mining sector. After successful trials, Company have received orders for 5 numbers of 180T Electrical Excavators. Further orders are in the pipeline for 150T & 190T high end dumpers.

In-house Designed and Developed Arjun Armoured Repair & Recovery Vehicle is presently under trials and further orders are expected which will result in FE savings for the country. The Company is also working with industry partners to leverage technology for the benefit of customers such as introducing AI features in machines. Towards protecting the Intellectual property of the Company, the innovation cell has succeeded in filing 65 patents covering innovations in product design, manufacturing and operations.

The Company is also working towards 'ZERO IMPORT' policy of GoI and has released EoI for all Imported items for localization. To boost indigenous content, BEML has plans to enter into JV with renowned MNCs for local production of defence spares, aggregates, cabin, high value metro car aggregates. BEML is working with ISRO for GPS based speedometers, tapping satellite signals Navigation and tracking of equipment thru AI features.

On export front, during 2018-19, the Company has exported goods & services to the tune of Rs.19.49 crore as against Rs.28.53 crore during the previous year. Exports were low due to delay in finalisation of tenders by customers including GoI Line of Credit (LoC) projects and

geo-political disturbances in Middle East & North Africa (MENA) region which is the focus territory for BEML.

For improving the geo-strategic reach and increasing exports, BEML is working on various business opportunities in Defence, Mining & Construction and Rail & Metro segments in SAARC and Africa.

Followings are the strategies adopted to enhance BEML's export business:

1. Widening BEML's Distributor Network in addition to direct sales
2. Brand building and visibility through Exhibitions and seminars
3. Collaboration with other DPSUs/ Indian companies
4. Joint Ventures in India or with local firms in abroad
5. Utilizing EXIM bank opportunities – Through Indian Lines of Credit
6. Through Chambers of Commerce / Embassies / Defence Attaches

GSL: Export project for 02 AOPVs to Sri Lanka Navy amounting to Rs. 869.26 Cr was successfully culminated in FY 2017-18. GSL has emerged L1 in Nigerian Navy global tender for acquisition of 02 X Landing Ship Tank (LST) in Jan 2018 and since then, the case for conclusion of contract for 01 LST approximately US\$70 million has been pursued with the Nigerian side. Case for procurement of 01 Training Ship (USD 50.48 M) from GSL under Line of Credit (LoC) to Nigerian MoD is also approved by MEA. Case for Ship Design and Construction Centre (SDCC) (USD 7.38 M), is in final stage of approval.

GSL has also steered case for design and construction of Multi-Purpose Offshore Patrol Vessel approximately Rs 560 Cr for Mauritius and the case is being pursued for acceptance by Mauritius Govt. However, there is inordinate delay in finalization of these contracts for the reasons beyond GSL control. After finalization, it will boost the export value substantially from the present value.

Research and Development by DPSUs

Recommendation No. 49

The importance of the role of in-house Research & Development (R&D) in the context of exports is no less. Notwithstanding the fact that transfer of technology etc., might come with the procurement of equipment from the original manufacturers, nevertheless in the long run, concerned efforts in the fields of R&D are very crucial. The Committee concur with the explanation of the Defence Secretary that after the enhanced capacity, the country gains not only economically but also strategically. The Committee find that the total expenditure as a percentage of Value of Production during the last three years have dipped in the PSUs like HAL, BEL and BEML.

Also the total expenditure on R&D as percentage of Profit After Tax has dipped in case of HAL, BEL, GRSE and HSL. The Committee would like to know as to why the percentage in both the fields is dwindling in the above mentioned DPSUs and the measures contemplated to arrest this trend. In case of GRSE, they would specifically like to know as to why the percentage in the latter case dipped from 107.84 in 2016-17 to 10.66 in 2018-19.

Reply of the Government

HAL: The total R&D expenditure as % of VOP and as % PAT for past five years is as follows:

Particulars	Unit	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
R&D Expenditure	Rs in Cr	1042	1191	1284	1612	1464
Profit After Tax (PAT)	Rs in Cr	2388	1998	2616	1987	2282
R&D Expenditure as percentage of PAT	%	43.63	59.61	49.08	81.13	64.15

It could be seen from the above, the R&D Expenditure in absolute term has gone up constantly except for a surge in 2017-18. It was mainly due to higher R&D expenditure on LCH and HTT-40 and reduction in PAT in that year. R&D expenditure as a percentage of Profit After Tax (PAT) has broadly kept an upward trend.

Further, there were no major Customer funded R&D programmes approved by the Customer during & after 2018-19 and Development programmes are being undertaken mainly through HAL's internal funding.

However, R & D is a thrust area at HAL and sufficient resources are being allocated towards R&D activities. HAL has created an R & D Corpus with 10% of Operating Profit After Tax, which is being utilized both for in-house development and to encourage R & D in private sector including MSMEs. HAL R&D expenditure has been of the order of 6-7% of VoP and will be maintained at this level.

BEL: BEL has a well-established R & D setup to bring out state-of-the-art products. R & D has been the main focus of BEL for increasing indigenisation and value addition in its products/systems/solutions. BEL's R&D structure comprises two Central Research Laboratories (Bengaluru & Ghaziabad) engaged in developing cutting edge technologies. It also has Unit/SBU level Design & Development teams addressing relevant business areas. Besides, BEL has a Software Technology Centre and a Product Development & Innovation Centre at Bengaluru with focus on development of new modules / products. At present, around 87% of BEL's turnover is generated from indigenous technology. As on date, BEL has filed for 412 Patent Applications (including copyrights) out of which 8 patents have already been granted.

BEL's new product development is carried out through in-house R&D / D&E, joint development with DRDO, National R&D Labs/Academia and collaborative R&D with Indian private industries including MSMEs/Start-ups. Import substitution of critical sub-systems is also carried out through in-house efforts /domestic vendor base. BEL spends 9–10% of its annual turnover on an average, on R&D (fully met through internal accruals). Details of R&D spend over the last three years are tabulated below:

Description	2016-17	2017-18	2018-19
R & D Expenditure (Rs. Cr)	777	988	1,077
R & D Expenditure as a percentage of turnover	8.81%	9.80%	9.14%
R&D Expenditure as a Percentage of VoP	8.41%	10.22%	9.03%
R&D Expenditure as a Percentage of PAT	50.19%	70.62%	55.89%

From the above table, it can be seen that the R&D expenditure in terms of value is on the continuous rise year-on-year. Dip in R&D expenditure as a percentage of “Value of Production” for 2018–19 is due to the fact that a substantial portion of the company’s turnover in 2018–19 was derived from the sale of Electronic Voting Machines (EVM) and Voter Verifiable Paper Audit Trail Units (VVPAT). The EVM & VVPAT are totally in-house designed and matured products that did not require significant new R&D efforts. It is therefore submitted that actual R&D expenditure of BEL had in fact seen an increase of 9% in 2018–19 (actuals: Rs 1,077 crore) when compared to 2017–18 (actuals: Rs.988 crore).

Further, being indigenously designed, developed and manufactured by BEL, sale of EVMs and VVPATs enabled BEL to cut down on the ToT and import costs.

GRSE: The R&D Expenditure incurred by GRSE during the last 05 years is given below:-
(Rs. in crore)

Sl.	FY	Value of Production (VoP)	Profit After Tax (PAT)	R&D Expenditure	R&D Expenditure as a % of PAT
1	2018-19	1378.77	109.94	11.72	10.66
2	2017-18	1345.52	92.40	11.19	12.11
3	2016-17	927.84	12.23	13.19	107.84
4	2015-16	1660.75	162.05	15.19	9.37
5	2014-15	1612.66	43.45	13.81	31.78

R&D expenditure primarily depends on the requirements of the projects handled by GRSE and not entirely on the profit generated by the Shipyard during a particular financial year. R&D expenditure of GRSE generally fluctuates between Rs 11 crore to Rs 15 crore per annum. From the above Table It may be submitted that for FY 2016-17 PAT of Rs. 12.23 Cr. was registered against a lower Value of Production (VoP) of Rs. 927.84 Cr. where as for FY 2018-19 PAT of Rs. 109.94 Cr. was registered against a higher Value of Production (VoP) of Rs. 1378.77 Cr. .The R&D Expenditure for FY 2016-17 and FY 2018-19 were Rs 13.19 crore and Rs 11.72 crore respectively. The fluctuation in R&D Expenditure as a % of PAT is mainly attributable to lower PAT registered in FY 2016-17 compared to FY 2018-19.

HSL: It is pertinent to note that, there is no exclusive R&D unit in HSL. Being engaged in building and repairs of ships and submarines as its core business, HSL on its own doesn’t involve in research & development of any equipment or machinery, but only select, procure, install and

integrate equipment & machineries procured from various sources either indigenous or foreign, into the Hull structure fabricated by the yard.

HSL has a well-equipped Design & Drawing Office, which in the past has developed in-house design for a number of vessels. HSL's design department has been recognized as in-house R&D unit by Department of Scientific & Industrial Research (DSIR), Ministry of Science & Technology. The total expenditure incurred by Design & Drawing Office is being considered as R&D expenditure of HSL. The dip in R&D expenditure in 2018-19 when compared with previous year is mainly attributable to dip in Value of Production which is due to low order book position of the shipyard.

Time slippages in delivery of products

Recommendation No. 50

The Committee note that there have been slippages on the part of DPSUs in conforming to the delivery schedule of products for the Forces. Admittedly, the dependence of HAL products on multiple stakeholders, including foreign Original Equipment Manufacturers (OEMs) in most of the cases, at times poses unforeseen challenges. The US sanctions during LCA Tejas development which is turn led to delay in certification of the aircraft, delay in receipt of License Technical Documents (LTD) from Licensor in case of Su-30MKI manufacturing etc, are few such instances.

The Committee have been informed during evidence that as of October 2019, 213 out of 222 Su-30MKI aircraft have been supplied to Air Force. As regards BEL, some of the large complex projects get delayed due to concurrent engineering, accord of bulk production clearance, change in user requirement, specification to incorporate additional features, lack of site/platform readiness etc. In the recent past, the deliveries of BEML Tatra 8x8 Heavy Duty truck, Armoured Recovery Vehicles (ARV) and Bulk Production Clearance for Sarvatra Bridge System have been delayed due to the extraordinary situations. Further, there are slippages in the execution of Akash Weapon System Contract & Anti-Tank Guided Missiles (ATGM) Contracts by BDL. In HSL, there have been cost and time slippages due to various reasons like delay due to lack of working capital, numerous design changes, re-work, various modifications and delay in getting of drawings. The Committee recommend that MDL should focus on the delays occurred due to various reasons and take steps so timelines are always met and our Navy get the submarines/ships etc. without delays as per their procurement plan.

Reply of the Government

MDL: The recommendation of the Standing Committee is noted positively and MDL always puts utmost efforts to deliver quality ships/submarines on time, as it is MDL's Mission.

A. Delays caused in case of Shipbuilding and initiative taken to overcome delays as follows:

Some of the designs/specifications of engineering equipment, weapon systems & sensors are not frozen in the beginning considering rapidly evolving technology and changing strategic requirements. Due to these aspects the design of ship and its internal structure keeps on changing intermittently till the trials. Hence, when the specifications of systems/equipment get delayed, it obviously impacts the project timelines. It is to be noted that some of these systems/equipment are of developmental nature which are being conceptualized, designed, tried & tested in collaboration with organizations like DRDO and other companies. The final specifications of such systems/equipment are available for manufacturing only after prototype testing. Hence, the project activity gets impacted for want of the finally manufactured systems/equipment. Due to involvement of various stakeholders in shipbuilding industry, the timelines of construction are impacted. Also, the non-availability of Buyer Furnished Equipment (BFEs) & Buyer Nominated Equipment (BNEs) affects the timelines.

To overcome the above mentioned delays in the shipbuilding industry, following measures need to be taken:

- i. Ship design should be frozen before the signing of the contract.
- ii. Weapons and sensors specifications should be well defined at the early stage of the project
- iii. Dependency upon the imported items to be minimized
- iv. Type testing facilities to be enhanced
- v. Developmental items should not be considered for the new construction

B. Delays caused in case of Submarine and initiative taken to overcome delays as follows:

The delays occurred in P75 are mainly due to delay in supply of material by the OEMs nominated by the collaborator, defects occurring on the items during trial phase, recurring defects encountered during trials due to basic issue of reliability of discrete items and also platform reliability. The support from the OEMs of the defective material has also not been forthcoming & the response not been matured to handle defence export orders. There were lots of design changes implemented by the collaborator based on experience of Scorpenes built for Chilean & Malaysian Navy. These aspects were beyond the control of MDL since they could not be mitigated even after taking up the issues at all the possible levels including the Government to Government levels. The reasons for delay in delivery of Boats is elaborated in succeeding paragraphs:

2. As per original contract, Boat 1 was to be delivered in Dec' 12 with delivery of subsequent boats at twelve months interval. The brief details regarding revision in delivery schedule are as follows: -

(a) 1st Phase delay (30 months) due to requirement of enhanced cost for Material Procurement. The original delivery schedule of the boats was revised by 30 months due to delay in sanction of additional amount required for MPM procurement. This shift of 30 months (from Dec'12 to Jun'15 for SM1) in delivery dates of all boats was regularised by amendment no.3 to the Contract.

(b) 2nd Phase delay (15 months) due to requirement of procurement of 168 MPM items under Single Tender Offer. Higher quotes, poor response by nominated vendors and

also frequent changes in the specifications by Collaborator left MDL with no option but to take MOD approval for Single Tender Offer for 168 MPM items. Based on compressed delivery schedule of 168 MPM items as indicated by DCNS, a 15 months delay (from Jun '15 to Sep '16 for SM1) was mutually agreed.

Post obtaining the CCS approval for revised delivery schedule to accommodate the issue of delay in order placement for material, the progress of the project has been further impacted by material delays, recurring defects, re-appropriation for defective material, non-availability of OEM specialists for defect analysis and rectification and also incomplete / incorrect Technical Data Packages (TDP). Though CCS approved delivery date for Boat 1 as Jun17, however Jun 15 was considered as delivery date for application of LD. The reason for delay in the schedule from Jun '15 to Sep '16 as brought out in para 2 (b) is the requirement of getting MoD sanction for procurement of 168 MPM items under Single Tender Offer.

3. The various reasons of delays beyond Sep '16, which resulted in recast deliveries, are elaborated under following: -
 - a) Reasons for delays Sep'16 to Jun '17
 - b) Reasons for delay post Jun '17.
 - c) Third Phase:

REASONS FOR RECAST DELIVERY SCHEDULE OF BOATS 1-6 FROM SEP 2016 TO JUNE 2017

4. Primary Reasons for recast delivery. Delay in supply of material by Collaborator & OEMs, design deficiencies in Technical Data Package (TDP), unsatisfactory performance of certain systems and equipment, supply of defective material, non-resolution of defects for unduly long time by the Collaborator and the OEMs, recurring defects and difficulty in conducting sea trials during monsoon period. The detailed reasons for the delays are enumerated in succeeding paragraphs.
 - (a) Non availability of Navantia specialists. The Aft portion of the Scorpene submarine has been designed by Navantia. The termination of the contract between Navantia and Naval Group resulted in delayed technical advice / inputs during critical phases of submarine construction. This impacted timelines of construction schedule.
 - (b) Material. The material non-availability has always been a major hindrance for timely progress of project activities. According to build sequence, all material is required to be available minimum 8 to 10 months prior to commencement of joining of fully outfitted sections. However major equipment like Diesel Alternator Rectifier (DARs), Ventilation Fans, Hull Valves, Junction Blocks and Electrical Mobile Parts were delayed by up to 62 months (5 years) from the material required dates as compared to delivery date of June'15 for Boat-1. Although concerted efforts were made to reduce the impact of material delays by going ahead with joining of sections to optimise time & use of dummy (sometimes even without receiving all the material), the late receipt of material has always resulted in substantial rework during installation period and thereby introduced un-avoidable time delay despite best efforts.

- (c) Technical Data Package (TDP). The detailed design of the project is provisioned in the TDP in COS / POS format which forms backbone tool in the TOT. It consists of all necessary information, drawings, documents and specifications for construction of the Submarine. The issues related to TDP are as follows:
- (i) Incorrectness and incompleteness of TDP supplied by Naval Group is significant contributor for delay in delivery of submarines. Which required more than 10,000 interventions (TIR, TAF, PTP amendments etc.).
 - (ii) As per the Collaboration Agreement, complete TDP was to be delivered in six batches. The sixth batch was to be contractually delivered by SDC +36 (i.e. 15 Dec '08). First five batches were delivered by Collaborator by Jul'08. However, MDL found shortfalls / deficiencies in content of these batches. When taken up during PRM 07 on 27-29 May '08, Collaborator agreed to resolve all deficiencies and ensured completeness and correctness of TDP data. Accordingly, Collaborator proposed splitting of 6th Batch into 14 sub-Batches till Dec '13.
 - (iii) However, despite splitting and extension of deliveries of TDP batches, Collaborator has still not frozen the TDP till date. Further, the last 14th sub-batch was split into micro batches with Micro Batch-35 delivered as late as Dec'18. The non-availability of complete and correct TDPIIS has been a major hurdle in progressing with construction, STW & Trials in accordance with schedule. Despite issue being taken up at highest levels in Naval Group including at Government to Government level, the TDP is not yet frozen.
- (d) Delay due to non-availability of OEM Specialist and Defect Rectification. Post completion of installations of equipment and systems as per specifications, large no. of defects were observed during the STW, HATs & SATs phase. Substantial time was lost in identification and resolving defects by the OEM Specialists. Also, non-availability of concerned specialists from the collaborator / OEMs like Navantia, MAN, Jeumont on time adversely impacted sea trial schedule and timelines for delivery of the submarines. Scorpene submarine is designed to have high level of automation wherein all platform installations are being centrally monitored and operated using IPMS. The table below depicts the major issues / defects experienced in Boat 1 along with the time duration for their resolution. For example, defect rectification of IPMS took more than 26 months duration. Frequent modification and upgradation of IPMS software resulted in tuning and

REASONS FOR RECAST DELIVERY SCHEDULE OF BOATS 1-6 BEYOND CCS APPROVAL OF JUNE 2017

5. Whilst the delivery schedule was already amended vide CCS approval of 2017, the major reasons for the delays such as delay in delivery of materials (DAR, Hull Valves etc.), recurring defects, Software updation, TDP incompleteness & in-correctness, delay in availability of OEM Specialists, delay in defect rectification by OEM are continuing and impacting construction schedule of boats.
6. In addition, reasons encountered further impacting delivery schedule are listed below:
 - (a) Modifications (Hi-Fog, Exhaust Gas Diffuser etc.)
 - (b) Re-appropriation of defective Items (approx. 8000 in nos.)
 - (c) Water leakage in cooling circuit of EPM#3
 - (d) Piston replacement of Diesel Engines.
7. As indicated in above paragraphs, certain aspects were beyond the control of MDL and could not be mitigated at the initial phase of the project. However, the recommendation of the Standing Committee is noted positively. MDL has always put in utmost efforts to deliver quality ships/submarines as per the timelines and Navy gets it as per their production plan.
8. MDL Initiatives.MDL had taken following initiatives to mitigate project delays and tried innovative solutions to emergent situations of the project: -
 - (a) Early Commencement of boat production in order to avail sufficient time for outfitting and undertake boot together even though all the items were not available in time. This enabled program with other action which could only commence after boot together.
 - (b) Increase in outsourcing content of fabrication, machining, outfitting activities and allied services
 - (c) Task force formed to focus and expedite the outfitting phase of the boat which is critical & more complex.
 - (d) Framework of leasing and purchase agreement (FLPA) signed with collaborator for Temporary loan/leasing of any critical Items/Materials/Tools required during project.
 - (e) Integrated Progress Monitoring Team (IPMT) created for quick decision making & resolution of issues.
 - (f) Dedicated Test & Trial team formed for smooth organising& conducting of HATs & SATs.
 - (g) Section 1 lifting Jig designed in-house and fabricated by MDL to reduce time required in dry dock for shaft alignment.

Recommendation No. 51:

The Committee find the situation paradoxical as on one hand, the DPSUs are facing the challenges of insufficient capacity utilisation and decline in production and on the other hand, supply of aircraft, vessels, heavy duty trucks, ATGMs, weapon systems, etc. to the Services has been delayed due to numerous reasons such as delay in receipts of sanctions, certification, change in user requirement, back of site/platform readiness, software issues, re-works, delay in delivery of material etc. They are disappointed to note that majority of the cited reasons for delay in delivery of the products for our Armed forces are noting but lapses in planning and execution by the DPSUs. At this stage, the Committee can only recommend that DPSUs build a better foresight mechanism and develop more rigorous systems in order to enable them to obviate the delays of the nature mentioned in the preceding paragraph. They need to build a sound mechanism with foreign Original Equipment Manufacturers (OEMs) and insert clauses that do not hamper the Defence commercial transactions in any manner. The Committee also recommend that each and every case of delay should be viewed seriously and explanation containing inter alia the efforts done to minimize the delay should be communicated to them. The Committee also recommend that the DPSUs should implement all corrective measures to ensure timely supply of various weapon systems and accessories as delay at their end affects the war preparedness of our country. In case, it is felt that the delays took place due to negligence/ dereliction of duties, the DPSUs should not hesitate to fix responsibilities under intimation to the Committee.

Reply of the Government

HAL: HAL products are highly technology intensive involving dependence on multiple stakeholders, including foreign OEMs as rightly brought out by the committee recommendation. Also uncertainties are involved in development projects. These, at times, have resulted in instances of rescheduling of deliveries in consultation with customers. However, HAL has a well-placed planning, monitoring and review mechanism to monitor project execution progress at various levels and actions such as augmentation of facilities, increase in outsourcing, duplication of jigs etc., are implemented as required.

Regarding Su-30MKI project, as of end Dec 2019, 214 aircraft have been produced by HAL and the available order will be completed by Mar'20.

Regarding building up suitable contractual conditions during contracts with foreign OEMs, HAL has laid down detailed procurement guidelines to ensure meeting the timely requirement of customers, for various program. Some of the major initiative / guidelines are indicated below:

Ensuring timely supplies:

- Items are ordered in a single go (upto 5 years) with staggered delivery.
- In case of ROH (Repair and Overhaul) programme ordering is done 3 years in advance, considering 01 year firm task and 02 years forecast task.
- All HAL Purchase Orders / Contracts have liquidated damages (LD) clause.
- In cases of new development program, the contract also contains clause for submission of security Deposit

Seeking life time support from OEM:

- During Transfer of Technology (ToT) from OEM, generally commitment / assurance for lifetime support by OEM to ensure timely support and supply of requisite spares all along and to address obsolescence issues.

Monitoring delays by Vendors:

- All suppliers are to provide Performance Bank Guarantee to ensure performance the products in-line with the contract.

Other measures to mitigate the delays include indigenisation of fast moving & bulk items, product up gradations to mitigate obsolescence issues etc.

BEL: BEL is in complete agreement with the recommendations of the Committee as regards delivery of the products/services to the Defence Forces. Meeting the delivery requirements of our customers, primarily the Indian Armed Forces is of paramount importance to BEL. With the usage of state-of-the-art Project Management tools, all efforts are made to ensure timely delivery to customers as per contract. As part of our continuous improvement of on-time delivery, the root cause for delay in delivery of some of the projects is analyzed and necessary corrective/preventive measures are taken to minimize/zero down the same. The On-time delivery during last 5 years is around 80%. However, it is re-iterated that though BEL provides thrust on timely delivery, it is inevitable that some of the large complex projects get delayed due to Concurrent Engineering, accord of Bulk Production Clearance, Change in user requirement, Specifications to incorporate additional features, Site/platform Readiness etc. All these measures and improvement processes are expected to further enhance the on-time delivery.

It is also pertinent to mention here that BEL's procurement process is governed by robust Purchase Procedure manual which has been incorporated with requisite clauses w.r.t delivery timelines. BEL also has shows zero tolerance towards negligence/derelection of duties, if any, and appropriate actions are taken as per company norms.

BEML: It is informed that the delay in supply of Heavy-Duty Trucks was due to special situation of restriction arised during 2012 which is a stray case. However, the same was resolved and supplies were resumed. Only in respect of supply of Armoured Recovery Vehicles, certain issues are being resolved and supplies will start in due course. Systems are put in place to ensure timely deliveries.

BDL: The shortfall in meeting the delivery schedules to the forces are mainly due to non-receipt of certain imported materials from OEM, Sea Acceptance Test, Booster & Sustainer Propellants, non-completion of static test of Booster Grains as polymerization time of Booster Grains to get the desired results required 9 months curing time, non-availability of Indigenous Thermal Battery in time, problems in Front Section and Canister supplies by Foreign OEM as well as production hold on clearance for new vendor for small explosives and OEM related obsolesces criticalities. BDL is making all out efforts to implement all corrective measures to ensure timely supply of Indian Armed Forces.

MIDHANI:

DPSU to build a better foresight mechanism

MIDHANI supplies materials to defence equipment manufacturers like OFB, DRDO, HAL, BDL etc. Currently MIDHANI has no visibility of its product requirements beyond one or two years. Five years/ten procurement plans of their involved in production of defence equipment such DPSU/Govt organisations will help MIDHANI to procure raw materials as better as cost and thus supply materials at better prices without insisting for Minimum order quality.

MDL:

1. Delays in Shipbuilding industries are due to the following reasons:
 - i. Delay in finalization of weapons and sensors by customer i.e. Indian Navy
 - ii. Late finalization of General Arrangement (GA) drawings
 - iii. Incomplete Specification of Technical Requirements (SOTR)
 - iv. Delay in submission of binding data and detailed drawings by the OEMs
 - v. Lack of type testing facility in India leading to delay in the testing and trials of equipment
 - vi. Insufficiency in respect of indigenous sourcing, vendor's capability in line with advanced technological requirements for the technologically advanced naval vessels.
2. The above mentioned delays are beyond the control of the shipbuilder. MDL has raised these issues time and again in regular meetings with the customers (through CPRM) and at the Ministry level (APEX review). OEM related delays are monitored and minimized through regular follow up and Delinquent Item Meetings (DIM).
3. Following remedial action are suggested for the Customer Indian Navy:
 - vii. Ship design should be frozen before the signing of the contract.
 - viii. Weapons and sensors specifications should be well defined at the early stage of the project
 - ix. Dependency upon the imported items to be minimized
 - x. Type testing facilities to be enhanced
 - xi. Developmental items should not be considered for the new construction
 - xii. There should be special vendor development cell for customized ship related equipment for timely availability of the equipment.

MDL is following DPE guidelines for all procurements and timely amending the Purchase Manual to overcome these delays.

GRSE: GRSE has been formulating robust contracts with foreign OEMs and large Indian firms, supplying critical equipment for shipbuilding, incorporating appropriate commercial terms e.g. Risk Purchase, Liquidated Damages, Arbitration etc to mitigate and obviate delays in delivery and execution of contracts.

GRSE has also been implementing process and procedures for rigorous monitoring of the project timelines, inclusive of monitoring and expediting mechanism to arrest project time overrun, on account of failures from the vendors to honour the contractual commitments.

There have been instances of few lapses from large PSU vendors, e.g. SAIL in supplying DMR Grade Steel Plates and also failures on the part of few MSE firms, engaged in various supply and services activities, which are being diligently reviewed and pursued at all levels to meet the commitments to our customer, IN and ICG.

GSL: There has been no delay in delivery of products by GSL to its customers. During last five years, GSL delivered six 105M Offshore Patrol Vessels (OPVs) to Indian Coast Guard, two Offshore Patrol Vessel (OPV) to Sri Lanka Navy, two Fast Patrol Vessel & 11 Fast Interceptor Boats for Government of Mauritius, one Damage Control Simulator for Myanmar Navy, one Damage Control Simulator, one Nuclear Biological Chemical Training Facility and Four 1000 T Fuel Barges for Indian Navy, all as per contractual schedule.

GSL implemented following system to obviate delays in procurement:

- a. GSL has initiated the process of evaluation of a New ERP Solution which will encompass all the functions of the Company on a single platform with flexibility of integration with diverse systems both internal as well as external portals. The process for appointment of System Integrator, who will develop and implement the new ERP Solution, is underway.
- b. Online e-procurement system in collaboration with NIC for value exceeding Rs. 2 Lakhs.
- c. Online approval of procurement proposal through GSL's intranet.
- d. Procurement through Government e Marketplace (GeM).
- e. Monitoring by way of progress review meetings.
- f. Follow-up by teleconic reminders, letters and deputation of reps. to OEM premises.
- g. Online receipt inspection with auto forwarding inspection reports to suppliers.
- h. Online Bill Tracking System for making timely payment.
- i. Online payment through RTGS to suppliers.

GSL has taken the following steps to strengthen commercial transaction with OEMs.

- a. Make in India.
- b. Procurement through GeM.
- c. GSL encouraging OEMs for Deemed registration with GSL.
- d. Provision of Video Conferencing with OEMs for technical/commercial discussion.
- e. Signing of MoU with OEMs
- f. Participation in Vendor Development programs with OEMs.
- g. Aligning Govt. policies of M/o MSME, MoD, MoF, Ministry of Commerce etc.
- h. Policy formulation from time to time based on business need.

HSL: It is agreed that there has been time slippages in the past while execution of some projects due to various reasons like delay due to lack of working capital, numerous design changes,

re-works, various modifications and delay in getting approval of drawings etc. However, it is pertinent to mention that HSL has completed all those legacy projects (13 Nos) pending since 2010 during the last four years on fast track basis.

In the ship repair front, HSL has completed repairs of 13 vessels of different types for varied customers like Indian Navy, DCI, SCI, FSI, VPT etc. during the year 2019. The shipyard has achieved another milestone by completing the maiden refit of INS Astradharini, a torpedo launch and recovery vessel for Indian Navy, two weeks ahead of contractual refit schedule.

In the submarine division, Normal Refit of Indian Navy Submarine 'INS Sindhuvir', is progressing satisfactorily. The submarine was undocked on July 22, 2019 and presently undergoing trials. The submarine has completed maiden sea-sortie on 03 Dec 19, 2nd sea-sortie with full power trials on 21 Dec 19 and 3rd sea-sortie with check dive & full power trials on 10-11 Jan 2020. It is also planned to deliver the submarine by 31 Jan 2020 to Indian Navy i.e. eight days ahead of contractual schedule.

Further, the ongoing shipbuilding projects such as Fleet support vessel, 2 No Diving support vessels, 4 nos 50T BP Tugs for Indian Navy are being executed as per strict contractual time lines. New concept of 'Throughput assignment' has been introduced in the production processes for construction of 2 Nos. Diving Support Vessels (DSV) and 50 T Tugs projects in order to meet the contractual timelines. Production activities like plate cutting, block fabrication & erection /consolidation are being monitored through "Throughput Analysis". Block fabrication is being done expeditiously for both these projects.

HSL has suggested that the following points may be considered for obviating delays in ship construction schedule:-

- (a) Indian navy to standardize design of Yard crafts like Tugs, Barges etc. and finalize equipment fit based on role, capacity so that Shipyards can construct tugs in shorter duration.
- (b) SOTRs of equipment to be used on Naval ships may be standardized by Navy especially of equipment such as Anchor chain cable, Windlass, anchors, Mooring capstan etc to be standardized with only minor changes based on design specific parameters. This has been done for RHIBs, Davits, STP etc. in the form of Naval Construction Documents.
- (c) With respect to Buyer nominated vendors (i.e. where Navy has nominated only one vendor), IN should ensure standard specifications are given to vendors (PSUs such as OFB, BEL, ECIL, HAL) and assist shipyard in ensuring availability of equipment as per construction schedule.

Indigenisation and self-reliance in defence production

Recommendation No. 52

The Committee have been apprised of the efforts towards indigenization and import substitution by the DPSUs. As regards HAL, the Greenfield facility planned at Tumakuru for

helicopters would cater to the manufacture of indigenously developed LUH program which will replace the ageing fleet of Cheetah/ Chetak helicopter produced under Transfer of Technology (ToT). Manufacture of state-of-the-art products like LCA, ALH, LCH, LUH, HTT-40 etc within the country will help avoid direct import to the extent of production by HAL thus furthering the import substitution efforts. Some of the major systems like Integrated Air Command & Control System (IACCS), Weapon Locating Radar (WLR), Cdr TI Sights, Tropo Upgrade, Integrated Communication System (ICS), Ground Based Mobile Elint System, Low Intensity Conflict Electronic Warfare System (LIC EWS), Electronic Voting Machine (EVM), Voter Verifiable Paper Audit Trail (VVPAT) etc., are indigenously designed & manufactured by BEL. Around 87 percent of turnover in BEL on an average is generated from indigenous technology by making use of in-house infrastructure/facilities, skilled manpower etc. BEML is going for outsourcing wherever capability / capacity is available in the private sector and generally restricts capital expenditure only to add machines for carrying out very critical operations. In BDL, indigenization of products like KONKURS-M ATGM, INVAR ATGM, MILAN-2T ATGM has been achieved upto 95 percent, 78.6 percent and 71 percent respectively. With completion of Infrastructure Augmentation Plan for Mine Counter Measure Vessels (MCMVs), GSL has indigenous capacity to build high technology MCMV using composite material for the first time in the Country. Considering that the DPSUs are the backbone of our defence production, they recommend the DPSUs to develop their core competence and maximize the import substitution efforts so that our country achieves self-reliance in defence production.

Reply of the Government

HAL: HAL is India's premier aerospace company with comprehensive skills in Design, Development, Upgrade, Manufacture and Maintenance of Fighters, Trainers, Helicopters, Transport Aircraft, Engines, Avionic Systems and accessories. Over the years, HAL has manufactured more than 4150 aircraft, of these 1440 aircraft (17 types of aircraft / helicopters) are of indigenous design and 14 types through license/ToT. Procurement of HAL's indigenous products are effective import substitutes which obviate the need for import of flyaway platforms from foreign manufactures. Hence, products like ALH, LCA, LCH, LUH, HTT-40 if inducted in greater numbers would definitely bring economy of scale to the Indian private vendors and would contribute to reduction of imports in the long term, as rightly brought out by the Committee recommendations.

Considering the service life of a platform ranging from 30 to 40 years there is necessity for multiple upgrades during the life cycle where in industry can pitch in with innovative solutions at different stages. HAL has successfully executed upgrades of Jaguar NAVWASS aircraft to DARIN-II Standard, MiG-21 BIS, MiG-27M, Sea Harrier, HS-748 (Avro), Do-228, Cheetah, Chetak Helicopter re-engineing etc thus increasing the lethal capabilities of these already proven platforms in the services inventory as well as for obsolescence management. Current upgrade programs are Jaguar DARIN-III, Mirage 2000 aircraft upgrade and the Hawk-i upgrade. Yet another instance is the SU-30 MKI integrated with the supersonic heavy weight cruise missile Brahmos making the platform highly lethal. All these efforts helps in import substitution in a big way.

Apart from the platform development, HAL also undertakes indigenisation of various high value systems and equipment of foreign origin fitted on HAL platforms to reduce dependence on imports and manage obsolescence, thus fostering self-reliance. Every year HAL

indigenizes more than 1000 imported items comprising of critical LRU's, sub-assemblies and detail parts in the effort to provide continued support for sustenance of the fleets and avoid production/ repair overhaul hold ups in HAL and save considerable foreign exchange. HAL also indigenises ARS/ Non ARS items to keep the fleets serviceable. Test rigs, TTGE items are also developed indigenously. Apart from the indigenisation support for HAL's own products, it extends support for maintenance and upgrade of aircraft & helicopters directly procured & used by defence services i.e., AN-32, Mirage-2000, UAV (Heron/ Search), Seaking etc.

HAL has made following concerted efforts on indigenization of components, accessories and systems for its various platforms over the years.

- Dedicated Indigenisation Cells at Division level and an Indigenisation Department at Corporate level.
- Hosted around 500 imported systems and sub systems of mechanical, electrical, avionics, instrumentation categories and more than 100 Tools, Testers and Ground Equipment (TTGE) in HAL's website to enable private industries to take up for indigenization. Details can be accessed through www.hal-india.co.in under Make In India. Contact details of division wise nodal officer for each item is also provided in the website.
- Details of testing facilities available at HAL also hosted in website which can be utilized by private industries.
- HAL is organizing/participating various vendor development programmes to identify capable vendors for Indigenization. Recent exhibitions participated are Jaipur, Belgaum, Aligarh, Kolkata, Chennai, Coimbatore and Bangalore etc
- HAL implemented the Make-II (Industry Funded) procedure with assured quantity in compliance of the Framework promulgated by MoD. The items identified for indigenisation under Make-II is being hosted in HAL's website.
- Data of imported items being populated in the SRIJAN Portal (Indigenisation) created by DPIT, MoD to facilitate import substitution through Indian Vendors.
- A Permanent Monitoring Committee at HAL is formulated to oversee Indigenisation activities, efforts company-wide.

All these activities support in the development of core competence of the company and to maximize the import substitution efforts so that our country achieves self-reliance in defence production.

BEL: BEL iscontinuously making all efforts to maximize import substitution towards reaching self-reliance. Some of the measures taken in this regard are:

- Reduction in imports has been set as MoU target for the year 2019-20.
- Minimizing Import Bill is one of the challenges of CPSE Conclave. BEL has completed indigenization through in-house development of the targeted 5 projects in this regard.
- BEL has collaborated with other CPSEs/OFB for Integration of Innovation & Research. BEL has identified projects viz., Future Infantry Combat Vehicle (FICV), Project Dhanush Gun Electronic Suite, Directing Gear for (B&D) Class Ships, Software for Radar Warning Receiver for HAWK, and Transducer Element. The efforts will yield indigenous development of systems.

- BEL has rolled out collaborative R&D initiatives for joint developments with reputed domestic companies and MSMEs to quickly harness specialized technologies into the new products.
- BEL has recently established a Product Development & Innovation Center (PDIC) at Bengaluru. PDIC will focus on development of common technology modules and sub-systems for use across the company primarily with the objective of reducing import dependence besides achieving savings & Value Addition.
- As part of Indigenization reforms Eighteen Eols under Make-II have been published on BEL's e-Procurement portal to attract capable/prospective domestic manufactures for indigenization. Till date, BEL has uploaded 1,332 items on 'Srijan' (DDP) Portal for indigenization. Besides, 13 Eols are under internal approval for publishing on e-procurement portal.

All the above measures are expected to further maximize the company's import substitution thereby achieving self-reliance.

BDL: In BDL, indigenization of products like Konkurs-M ATGM, Invar –ATGM, Milan -2T ATGM has been achieved 95%, 78.6% and 71% respectively.

Product wise Indigenization levels are as follows:

Product	Achieved	Remarks
Konkurs-M	95%	Further 5% Indigenization is not viable/economical.
Invar	78.6%	Indigenization upto 95% is under progress & will be completed by 2022. Further 5% of Indigenization is not viable/economical.
Milan 2T	71%	As per the contract 71% of Indigenization is completed Remaining 29% is supplied by OEM as a kit.(Being all time import)

BEML: BEML has given major thrust to Self-Reliance and already achieved indigenization levels of over 90% in the mainline Mining & Construction products, over 80% in Rail coaches & EMU's, and High Mobility Vehicles (HMV) and over 60% in Metro cars. The overall import content depends on product mix manufactured each year.

R&D is central to BEML's operations wherein over 65 % of the turnover comes from R&D developed products. The R&D expenditure is around 2 ~ 3% of turnover which is in line with the international standards in the sectors BEML operates.

Our R&D team undertook many initiatives for design and development of high technology products, aggregates and upgradation of existing products as per customer requirements. Measures were taken to bring in renewed focus on innovation for new products and technology development, product up-gradation and indigenization. BEML R&D has indigenously developed "Make In India" Products 150T & 190T Dump Trucks and 180T Electrical Excavator. These biggest electric drive dump trucks were designed and manufactured for the first time in India and are major import substitution products for the Mining sector.

Also, in Defence segment, BEML in association with M/s. CVRDE, has Designed, Developed and Supplied Arjun Armoured Repair & Recovery Vehicle (ARRV) which is under trials and further orders are expected which will result in FE savings for the country.

An Innovation Cell has been created to scout for new technologies and potential partnerships start-ups to develop new products and aggregates. We have instituted Awards to identify and encourage R&D engineers. Towards protecting the Intellectual property of the Company, the innovation cell has succeeded in filing 85 patents and received 7 patents so far covering innovations in product design, manufacturing and operations.

The Company is also engaging with premier academic institutions, R&D establishments like DRDO and ARAI and Industry Partners to leverage technology for the benefit of customers such as introducing AI features in machines.

Steps taken by Company to bring down Import level:

- Indigenisation Committee has been formed at each manufacturing division having members from R&D, Planning, Purchase and Production. The indigenization activity is monitored at Corporate level on regular basis.
- The Company is also working towards 'ZERO IMPORT' policy of Gol and has released EoI for all Imported items for localization.
- To boost indigenous content, BEML has plans to enter into JV with renowned MNCs for local production of defence spares & aggregates, cabin, high value metro car aggregates.

MIDHANI: MIDHANI was conceived to achieve self-reliance in manufacturing of a wide spectrum of critical and complex alloys like Super Alloys, Titanium Alloys and Special Steels in a variety of mill forms. MIDHANI is a raw material supplier/partner to strategic sectors like Defence, Space, nuclear & aerospace.

MIDHANI has developed several important materials which include Special Steels, Super alloys and Titanium alloys mentioned as below. The indigenous development of these materials reduced the dependency of India on import from other nation.

- Successfully indigenized various grades of steels (25X17H2b, 18X13H3, 07X16H4b, MDN430M) for light water reactor of nuclear submarines.
- Developed hot erosion resistance alloy Superfast 868C castings for coal burner splitter plates and impeller of NTPC thermal power plants.
- ADOUR engine disc Jaguar aircraft.
- Successfully indigenized special steel 08X14H7M for space applications (LPSC).
- Successful developed nickel based alloy SN625 HP casing casting for AUSC for the first time in the country.
- Indigenously developed High temperature super alloys such as Superni 617, Superni 740, Superfer 800L and 304HCU required for Advanced Ultra Supercritical Power Plants to be built in India. This is very important contribution which is timely for the advancement of high efficiency power plants construction in India.

- A large number of alloys have been indigenized for strategic sector applications which include - 10 alloys for ISRO (semi-cryo engine), 8 alloys for nuclear, 5 alloys for aeronautical sector, etc during last 5 years.
- Indigenized manufacturing of titanium sea water filters and high pressure valves for nuclear submarine.
- Indigenization of MDN 9201 (Billets & bars), MDN 440 C Bars, MDN 250 extruded tubes, Titan 31 Bars.
- MONEL 400 Nickel- Copper alloy has been developed for nuclear power plants.
- Crusher hammer for coal crushing has been developed through close die forging. These hammers have been put to successful use at NTPC.

Details of strategic alloys developed for various sectors are given below.

Sector	Alloys Developed	Application Area
Defence	High strength low alloy steels Air hardening armour steels Special Titanium alloys Naval steels High saturation magnetic alloys Nickel base alloys	Gun barrels of Howitzer & Arjun Tank Armour Piping and heat exchangers Structural forgings Missile control systems Components for Nirbhay Missile
Space	Ultra High Strength Steel Nickel base Super Alloys Cobalt base Super Alloys	Motor Casing of Satellite Launch Vehicles (PSLV, GSLV) Semi Cryo-Engine parts High Strength Fasteners
Aeronautical	High strength beta Titanium alloys Carburizing steel	Air frame structures, Landing gear & Compressor disc Helicopter transmission assembly
Energy	Super alloys Hot Erosion Resistance alloys	AUSC power applications, & Reactivity control mechanism Thermal power applications
Commercial	Ferro Titanium	De-oxidation and alloy making

Apart from these MIDHANI has taken several initiatives for In-house development of capital equipment and also to promote Indian vendors.

Details of in-house Indigenization

S. No	Name of the item	Value post indigenization (In crore)	% of IC in the indigenized item
	Various valves and filters for Strategic Sector	18.50	100%
1	Armouring of Panels for Mi-17	14.40	100%

	Helicopter		
2	Design and manufacture of all Components and assembly of 20T Capacity Electro slag Refining furnace	11	100%
3	Design and manufacture of all components and assembly of 10T Capacity Vacuum Arc Re-melting Furnace	12	100%
4	Design and manufacture of all components and assembly of indigenous Auto billet grinding Machines	0.5	100%
		56.4 Cr	

Details of Indigenization through Indian Vendors

S. No.	Name of the item	Value post indigenization (In crore)	% of IC in the indigenized item
1	Indigenization of components for manufacturing and supply of LPG Bogie hearth furnaces (4 Nos)	33.89 crore	36.88
2	Indigenization of components for revamping of 1500T capacity forging press	15.55 crore	14.7
3	Indigenization of components for X ray fluorescent spectrometer	1.17 crore	24.35
4	Indigenization of components for manufacturing and supply of LPG Bogie hearth furnaces (Tempering furnace, furnace for end heating springs and walking beam furnace)	14.79 crore	33.53
5	Indigenization of components for isothermal forging facility	9.24 crore	15.79
6	Procurement of different type of scrap to replace import materials	20.94	100
		54.83 crore	

Challenges for Indigenization

Special steels, super alloy, titanium alloy and other product manufactured by MIDHANI are heavily dependent on input material like Nickel, Cobalt, Molybdenum, Chromium etc. which are not available in India mainly because of unavailability of relevant natural resources and are required to be imported.

However, MIDHANI has taken certain initiatives for indigenization as mentioned below.

Action Plan:

SI No	Raw Material	Action Taken for Indigenization
01	Nickel	MIDHANI has taken initiatives to set up manufacturing facility through public private partnership for cobalt, Nickel & molybdenum from internal generated scrap using the hydro metallurgy route. In this context MIDHANI has placed order on M/s IMMT, Bhubaneswar for technology support & process development for recovery of metals from plant reverts and secondary sources. Further setting up a plant through private partnership tender has been floated.
02	Cobalt	
03	Molybdenum	

MDL: A dedicated Department of Indigenisation has been setup in MDL in Oct 2015, with an objective to enhance indigenous content in the Warships and Submarines built at MDL. The department has been successful in addressing the indigenisation and import substitution needs of a large number of items with the help of the Indian industries.

Some of the major systems, sub-systems, equipment/items thus indigenised has not only resulted in considerable savings in foreign exchange but also reduced the cost of procurement in addition to India becoming self-reliant as far as requirement of these items is considered. MDL is spearheading setting up an operationalisation of NIRDESH, the National Institute for Research and development in Defence Shipbuilding, instituted to achieve complete self-reliance in warship research, design, technology development, skill upgradation and construction in India."

Public Procurement Policy (Preference to Make in India) has been implemented to increase the indigenous content of the procurement of items.

There has been an increasing trend in the Indigenous content in the Warships built at MDL. It is also observed that in the ongoing projects of warships, most of the weapons & related systems are being manufactured by Indian Companies viz. BEL, BRAHMOS etc. Indigenous content of Ships under construction (Project P15B & P17A) is expected to be 72% & 75% respectively.

Submarines are being constructed in collaboration with M/s Naval Group, France as per the contract. The expected indigenous content for this project (P75) is 30%. 60 equipment / items have been indigenized which amounts to approx. 30% of cost of total equipment / item.

Following additional items/equipment are under indigenization.

- (a) AC Plants
- (b) Food refrigeration plant
- (c) H₂, O₂, CO/CO₂ analyser
- (d) E-Glass Cloth with Adhesive Tapes
- (e) Sound Power Telephone
- (f) Intercom System
- (g) Main Broadcasting System
- (h) Battery Monitoring System
- (i) Static Frequency Converter

Further, feasibility of indigenization of following 4 equipment is being explored

- (a) Hoistable Mast
- (b) Full diving depth pumps
- (c) Hydraulic actuators of weapon launch tubes
- (d) Hydraulic Pumps

GSRE: GRSE has a very impressive record of Indigenisation, wherein our ships have a very high degree of indigenisation. This has been achieved with the joint effort between Indian Navy and GRSE, who have assiduously developed indigenous vendors and supported them. The table below

brings out the GRSE record in bringing the import content from 24.96 % to only 5.80 % over the last 7 years:

Financial Year	VOP	Import Material	Import Services	Direct Import	% of Import Content on VOP
1	2	3	4	5=3+4	6
FY18-19	1378.77	73.06	6.98	80.04	5.80
FY17-18	1345.52	122.40	9.66	132.06	9.81
FY16-17	927.08	62.04	12.25	74.29	8.01
FY15-16	1660.75	201.11	12.08	213.19	12.84
FY14-15	1612.66	223.67	13.94	237.61	14.73
FY13-14	1611.67	315.90	21.13	337.03	20.91
FY12-13	1529.15	379.92	1.73	381.65	24.96

GRSE has achieved over 90% indigenisation for Landing Craft Utility Ships, over 85% indigenisation for Anti Submarine Warfare Corvettes and over 70 % indigenisation for Fast Patrol Vessels and Water Jet Fast Attack Crafts. Ship design & construction is being done by GRSE using in-house/ indigenous resources. All yard material, fittings and commonly used equipment & systems are also sourced indigenously by the Shipyard. As far as the main equipment/ systems that are installed on-board warships, these are nominated by the customers (Navy/ Coast Guard) and GRSE's role is limited to that of an "Integrator".

GRSE has set a target to increase its efforts on indigenisation in all its ships slated for future delivery. Accordingly, GRSE has planned to encourage the participation of Public & Private sector firms and SMEs vendors in this endeavor. In addition, GRSE has identified some ship items which the shipyard plans to indigenise by interacting with the OEMs/ vendors through meets, exhibitions and one to one contact. To facilitate indigenisation, a new Indigenisation Cell headed by a General Manager level officer has been formed during Jun 2018. Outsourcing especially procurement of material and services from Indian vendors as a part of handholding of the Private Sector remains a strong business target of the company.

List of items which are identified for indigenisation during the upcoming years are as follows:

HULL & HULL OUTFIT:

- i. Fire Class Doors
- ii. Fire Class Windows
- iii. Telescopic Helo Hangers
- iv. Bridge Window Glass (Root Treated Windows)
- v. RAS Systems
- vi.

ENGINEERING:

- i. HP Air Fittings
- ii. Magazine Fire Fitting System (MFFS)

ELECTRICAL:

- i. Gyro (Ring Laser Or Fog)
- ii. Auto Plotter - Spl AIO Plotting Table (Looking for additional Vendor)
- iii. Data Acquisition and Processing System (DAPS) for Survey Vessels

NEW TECHNOLOGY:

- i. Unmanned Surface Vessels
- ii. ACVS / SES
- iii. Assault Bridge

Other measures: Ship borne items can be divided into the following categories:

Category A: Single/ Dual nomination by customer (Indian Navy/ Coast Guard)

Category B: Multivendor nomination by Customer (Indian Navy/ Coast Guard)

Category C: Shipyard scope, no nomination.

Indigenisation achieved for **Category C**, which is in the purview of shipyard is **almost 99%**.

Indigenisation achieved for **Category B**, generally pertains to Engineering equipment, wherein the indigenisation is **around 70%**.

Indigenisation achieved for **Category A** pertains to generally weapon systems, wherein the indigenisation is **around 30%**.

Indigenisation of Category A & B is in the purview of Service Headquarters. GRSE is a member in the committee under Chief of Material, IN to identify and progress indigenisation of items likely to be imported.

SELF-RELIANCE IN DEFENCE PRODUCTION

GRSE underwent major modernization and infrastructural augmentation and can now construct 20 ships (i.e. 08 large ships & 12 small ships) concurrently. Also, modernization of Raja Bagan Dock (RBD) unit of the company is underway. On completion of this modernization project by 2021 the shipbuilding capacity will increase from 20 to 24 ships concurrently. A Modern Pump Test Bed facility has been created at GRSE's Taratala unit on June 11, 2018 towards fruitful implementation of 'Make in India' programme.

Today GRSE is poised to fruitfully implement and fully utilise the integrated construction technology promoting modular construction for existing and upcoming shipbuilding projects to substantially reduce the build period.

The shipyard has a full-fledged Design Department with all modern infrastructure and software to take up any challenge of warship building. Virtual Reality Lab of Central Design Office was inaugurated at GRSE's 61 Park unit on 07th Jul 2018 for future ship designs. Shipyard's Central Design Office has been recognized and certified by Department of Scientific & Industrial Research (DSIR), Ministry of Science and Technology as an in-house "R&D Unit".

GRSE has MoU with Elbit Systems, Israel for development of Autonomous Unmanned Surface Vessel for Indian Navy. GRSE has a License Agreement for 10 years with M/s MacTeggart, Scott & Co. Ltd. UK for indigenisation and supply of Rail Less Helo Traversing System for Warships

and other ships. GRSE has signed a License Agreement with M/s MTU Friedrichshafen GmbH, Germany on 04th Mar 2017. The agreement is valid for 10 years and is for Overhauling, Assembly & Testing of MTU, Germany make 12V/16V4000M90 Diesel Engines from Semi Knocked Down (SKD) to Completely Built Unit (CBU). The Memorandum of Understanding (MoU) regarding development of engines for marine applications was signed between GRSE and M/s Cooper Corporation Pvt. Ltd., Satara, India on 16th Oct 2017. The scope of collaboration is to manufacture Diesel Alternators in the Range 50-500 KW with an aim towards self-reliance and to promote 'Make in India' initiatives.

GRSE has taken assistance from reputed agencies and Surveyor firms like PricewaterhouseCoopers, Delloitte, Ernst & Young, TCS for SAP, NBCC. AIMA, XLRI, NSTL, IIT Kharagpur, IIT Kanpur, IISc Bangalore, IRS Mumbai, Zeus Numerix, Marin Netherland, C-DAC, AVEVA Marine NAPA Altair Inc. and Fincantieri Italy to improve working and business of the company. Further, GRSE has engaged RINA, IRS and Conceptia for inspection services and IDRL for radiography. GRSE is in the process of implementation of PCMM maturity level 2 with the help of external agency QAI India Ltd.

GRSE has target of Filing 50 Nos. Applications for Patents/ Copy Rights/ Trademarks for GRSE developed products / processes by end 2022.

Research & Development (R&D) has always remained an endeavour of the company with an average expenditure of approximately 13 Crores per annum over last five years.

GSL: In line with Govt. of India 'Make in India' Policy, following initiatives for self-reliance in production of Defence equipment are taken at GSL:

- (a) GSL has successfully developed the design for 105 M Advanced Offshore Patrol Vessels (AOPVs), 90 M Offshore Patrol Vessels (OPVs) and 105 M Naval Offshore Patrol Vessels (NOPVs) for Indian Navy and Indian Coast Guard and for Landing Ship Tank, 105 M Corvette and 85 M Training cum Diving Vessel for export. Further, design for New Generation Missile Vessel, Multi-purpose Vessels, New Generation OPVs and 50 M Fast Patrol Vessel are being developed for Indian Defence forces. The Company's indigenously developed designs of Vessels have saved the Country's considerable amount of foreign exchange by avoiding import of ship designs and achievement of self-reliance to a very large extent.
- (b) The ongoing 05 CGOPV project in GSL has been indigenized under 'Make in India' initiative of Gol and has increased the indigenization content to 72% from 62% for recently concluded 06 CG OPV project.
- (c) **Project 1135.6 Frigates.** The Contract was signed by GSL with MoD on 25 Jan 2019 for acquisition of two 1135.6 follow-on ships under Russia collaboration for Indian Navy. The execution of this contract will result in developing indigenous capability in construction of stealth missile frigates, which are hitherto being acquired from Russia. This would enable development of indigenous design and construction capabilities of the Yard for competing in the international market. It will also provide another strategic shipbuilding

facility in India, capable of design and construction of advanced weapon intensive platforms.

- (d) **Mine Counter Measure Vessel (MCMV).** GSL has been nominated for construction of 12 MCMVs for the Indian Navy with hull made of composite material. Ships of this class would be built in the Country for the first time and it is envisaged to seek technology from shipyard having experience of building such vessels. Technology absorption in this process will provide self reliance in this rare technology and elevate GSL as one of the few shipyards in the world capable of making state-of-the-art MCMVs with composite material for requirements of defence forces.
- (e) **Hovercrafts.** GSL has aggressively bided for the Indian Coast Guard tender for 12 Hovercrafts in collaboration with M/s Griffon Hoverworks Limited. It is planned to manufacture these hovercrafts in India with over 60% indigenous content, obviating requirement to import hovercrafts. Further, technology absorption will pave the way for self-reliance in this segment and provide export opportunities.
- (f) GSL has been bidding aggressively for upcoming projects of the Indian Navy and Indian Coast Guard and endeavor to maximum the indigenization content with the help of Indian shipbuilding industry.
- (g) GSL has also signed/entered into MoUs/Collaboration agreements with the following foreign firms to jointly manufacture defence platforms/equipment:
 - (i) M/s. Naiad Dynamics Ltd., UK for indigenous manufacture and assembly of Steering Gear and Fin Stabilisers.
 - (ii) M/s. FHS, Germany for indigenous manufacture of Heli Landing Grid, Traversing System and Hanger doors.
 - (iii) M/s. DCNS, France (now Naval Group), for setting up advanced Submarine Escape Training Tower (SETT), IPMS Simulator and Combat Management Simulator for Submarines for Indian Navy.
 - (iv) M/s. Wartsila, France to indigenously manufacture and supply of CPP Stern Gear for ships built for Indian Navy and Coast Guard, etc.

HSL:

In true spirit, Make in India initiative of Indian Navy started in Hindustan Shipyard Ltd (HSL) in early 50s itself. The first two indigenously built ships INS Druvak and INS Darshak of Indian navy were constructed by HSL. INS Druvak was a mooring vessel delivered to Indian Navy in 1959 and INS Darshak was a hydrographic survey vessel delivered to Indian Navy in 1964. Since then, HSL has been contributing to the cause of indigenisation by undertaking constructions of warships of different types for the Navy and the Coast Guard. Most significantly it has undertaken the MR of the Foxtrot class submarines (INS Vagli) as well as MR-cum-modernisation of EKM class submarines (INS Sindhukirti), which otherwise had to be done in Russia. The yard has also nurtured a strong Design Office which can take up indigenous design of many kind of ships. Additionally, HSL has also built many ships and platforms for SCI, DCI, ONGC, GML, Port trusts, NIOT, Andaman & Nicobar administration etc.

Constraints / Challenges being faced by HSL

1. It is pertinent to note that, being engaged in building and repairs of ships and submarines as its core business, HSL on its own doesn't design, develop or manufacture any equipment or machinery, except for constructing the ship as a whole indigenously by assembling various equipment & machineries procured from various sources either indigenous or foreign.
2. Indigenization is a time-consuming process involving design, production of prototype, trials to evaluate its performance prior fitment on board ships. Shipbuilding and repair activities are time bound as per contract and required time frame will not be available to develop import substitutes within the contract period.
3. The yard has very limited option to develop import substitutes as it has to meet the requirements specified by the owner in the RFP and Build Specifications. Further, as per the existing guidelines, procurements are to be made through open/ global tenders for items above certain value, and in such cases, import of the items becomes inevitable if L1 bidder turns out to be a foreign vendor.

Measures to promote indigenisation

4. Despite above, Indigenisation is being promoted by HSL by avoiding imported equipment and sourcing equipment / machineries from domestic vendors wherever feasible and permitted. Indigenous content as a % of VoP achieved during the last 5 years is tabulated below.

Year	VoP (Rs crore)	Direct Import (Rs crore)	Indigenous content as a % of VoP
(1)	(2)	(3)	(4) = [(2)-(3)/(2)]*100
2014-15	294.16	99.52	66.17
2015-16	593.29	159.63	73.09
2016-17	629.05	65.18	89.64
2017-18	644.78	72.84	88.70
2018-19	594.91	92.04	84.53
2019-20 (Apr 19 to Dec 19)	259.03	31.75	87.74

5. HSL has not indigenized any item as a development project. However, import substitutes for large number of items have been identified and used by the shipyard in the projects executed in the past, one such worth mentioning is the Medium Refit cum Modernisation (MRCM) of Indian Naval Submarine 'INS Sindhukirti'. The refit required very special type of materials and fittings to meet stringent technical/ quality norms. Efforts had been made to find indigenous substitutes for certain Russian items since some of the items supplied under contract with RoE, Russia are either found insufficient or malfunctioning during trials of the Submarine. In most cases, material was not available in local market and HSL had to explore the industries/manufacturers all over India to meet the material requirement. Certain specialist equipment / facilities were procured / developed through experienced vendors. In addition, other suitable indigenous items like filler wires, paints, adhesives, insulation materials and fittings were also used. Thus, HSL had avoided delay in importing the items from RoE, saved precious foreign exchanges & dependency on RoE for basic raw material.

6. Items indigenized in-house/ developed through Indian vendors during last five years is tabulated below:-

7.

Year	Indigenized items / equipment	
	In-House	Through Indian Vendors
2014-15	Exhaust Manifold Self-priming system for Bilge pumps Design, fabrication & erection of Diffraction fence Design, fabrication and erection of Air Intake duct for Main Engine Modified structural design of DSV Ship by replacing Steel Bulb profiles of with Angle profiles in order to avoid import of bulb profiles	Hydraulic selector regime panel Anechoic Rubber Tiles& Adhesives Ferrous & nonferrous end fittings, SS & titanium fasteners and tubes Tank Side Blow valves and reducers Electrodes Ultratensal-MH and Ultratherme-H and filler wires Battery Pit Paints Adhesives DG Sets Pumps
2015-16	---	Air Filtration Units Main Alternator 1.2 MW Refrigeration Plant
2016-17	---	Air Handling Units Shaft Alternator 1.2 MW DG Sets Pumps
2017-18	---	Integrated Platform Management System (IPMS) Marine LAN Advanced Composite Communication System (ACCS) Modular Combat Management System (MOD CMS) Electrically Operated Gun Fighting Control System (EOGFCS) Link II MOD III (External communication system with ship, shore & aircraft for linking of various systems)
2018-19	---	Piping system components

8. The project-wise indigenisation content achieved for recent completed / ongoing projects is as follows:-

- 10 T BP Tugs for Indian Navy (6 Nos) – 66 %
- Fleet Support Vessel (11184) – 80 %
- Pontoons for DGNP (V) (4 Nos) – 100 %

9. HSL has been consistently making efforts to boost indigenization in its ship construction projects under Make in India policy. Following initiatives have been taken by HSL in this regard:-

- (a) Provisions contained in 'Public Procurement (Preference to Make in India), order 2017', issued by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, have been incorporated in Purchase Manual for implementation.
- (b) Chief Indigenisation Officer (CIO) has been nominated. Indigenisation Committee has been constituted to select the items to be indigenized
- (c) The MAKE-II Procedure has been incorporated in the Purchase Manual in order to indigenize imported items through development of prototype. Four items have been selected for indigenisation under Make II.
- (d) Assurance of orders for future requirement in 5 years on the same Indian firm which executed Import substitute order successfully.
- (e) Relaxation of norms (prior experience and prior turnover) for MSMEs and start-ups in all public procurements, subject to meeting quality and technical specifications.
- (f) Alignment to payment terms i.e; provision of advance payments to MSMEs.
- (g) Deemed registration of vendors (Vendors registered in other Defence PSUs are to be considered as deemed Registered)
- (h) Efforts are being made to identify Tier-I & Tier-II Vendors so as to facilitate development of import substitutes.
- (i) 'Make in India' Portal has been created in the HSL Website to attract vendors. The contact details of Nodal Officer have been provided in the portal. The list of items which are hitherto being imported are displayed on the website with an intent to Indigenise.
- (j) With a view to familiarize the Vendor, a special link 'Information to Vendors' has also been incorporated in the HSL portal, which provides information like Guidelines for vendor registration, commercial questionnaire for indigenous and foreign suppliers, HSL Standard business terms & conditions, List of items, materials, equipment & works, HSL Manual on procurement of materials and services, MSMEs – List of items reserved for purchase from small scale industries, Vendor registration form – Supplier ,Vendor registration Form-Contractor etc.
- (k) A direct link to the Make in India Page of Gol (<http://www.makeinindia.com>) has also been provided in the portal

10. Request for sanction of MRLC of 4th EKM Submarine. HSL has requisite capability, infrastructure & spare capacity for executing EKM class submarine refits. As part of capability enhancement, HSL has signed a comprehensive MoU with USBC of Russia to provide complete technical-logistics support for such works / refits / upgrades. HSL, achieved another historical milestone in submarine Repair capability by completing extensive repairs, upgrade, system integration and trials of INS Sindhuvir on 31 Jan 2020 i.e. ahead of the contractual delivery period of 09 Feb 2020. The submarine refit facilities of the shipyard have become idle after completion of Normal Refit of INS Sindhuvir. As per the directives of DAC, the MRLC of 4th EKM submarine 'INS Sindhughosh' is scheduled to be undertaken in India with the OEM assistance. HSL is putting its best efforts to bid for 4th MRLC. It is requested that the MRLC of 4th EKM Submarine may please be undertaken in HSL / Indian Shipyard and not send it to Russia. This will support the objective of Make in India policy of Gol thereby boost reduction in import dependence, provide encouragement to MSMEs and will also help in retaining the expertise developed in refit of EKM class submarines and optimum utilization of idling submarine refit facilities of the shipyard.

Welfare Issues

Recommendation No. 53

The Committee appreciate the assurance given by the representatives of Bharat Electronic Limited (BEL) that pharmacy facilities/ reimbursement would be extended to Delhi / NCR / Other Cities consequent to the finalization of the policy regard. The Committee see it as positive steps for the retired as well as serving officials and desire that all the offices of BEL including Liaison Offices are covered in some way or the other under the new policy so the retires officers are not required to travel to far off place just to purchase the prescribed medicines from a particular pharmacy. They would like it to be a time-bound exercise.

Reply of the Government

BEL has a tie up with M/s. Apollo Pharmacy for distribution of medicines through recognized Apollo Outlets to retirees on discounted rates. The facility is extended to retirees of Units / Offices of BEL viz. Bangalore, Ghaziabad, Delhi, Chennai, Panchkula, Pune, Navi Mumbai, Hyderabad, Kolkata, Vishakapatnam & Machilipatnam. The retiree who opts for the scheme, avails the facility as per the discounted rates. This facility has already been extended to NCR viz. Delhi, Noida, Ghaziabad, Gurugram and Faridabad.

CANTEEN STORES DEPARTMENT (CSD)

Budgetary Allocations

Recommendation No. 54

The Committee note that the Canteen Stores Department, a Government of India Undertaking under the Union Ministry of Defence, is committed to welfare of troops of the Army, Navy and Air Force and their families, through easy access to quality products of daily use at less than market prices. CSD's trading operation is worked around seven basic products like Toiletries, Household Requisites, General Use Items, Watches and Stationery, Liquor, Food & Medicinal Items, and four Wheelers, two Wheelers & white goods. The Committee have learnt during presentation before the Committee that against the projection of Rs. 21,978.86 crore, it has been allocated only Rs. 18,305.78 crore in BE 2019-20, leaving a gap of Rs. 3,670.08 crore. The Committee would like to know the reasons for not giving the projected amount to a profit making establishment and also to be apprised in what measure the working of CSD would be affected due to inadequate allocations.

Reply of the Government

HQ CSD had forwarded an estimate of Rs. 21,978.86 Crore for the FY 2019-2020. The actual funds allotted was Rs. 18,305.78 Crore. However, additional funds to the tune of 1247 Crore, were allotted in March, 2020.

Reduced allotment of funds leads to carry forward of outstanding liabilities in next financial year which in turn affects the working capital requirement of CSD.

However, the budgetary allocation towards CSD shall be reviewed during the course of the financial year and additional requirement shall be projected to Ministry of Finance.

Irregularities in CSD

Recommendation Nos. 55-56

The Committee note that there were irregularities in CSD, leading to arrest of two CSD Officers in July 2012 by CBI and FIR against few other officers leading to prosecution of two serving officers and departmental action against other officials. In December 2012 also, one case has been registered by CBI against CSD officers for taking unfair hospitalities from private party in which CBI had held an inquiry. As recommended by CBI, prosecution sanction has been issued for one officer and suitable departmental action is under progress. The case is also pending in the CBI Court. CBI also recommended suitable departmental action against other officers for which the case is under progress. The Committee also note that few other cases were reported; in 2013, one CSD officer was dismissed from service for unauthorised hoarding of CSD listed items at residence and other case of irregularity at CSD Depot, Ahmedabad regarding diversion of large quantity of CSD stores at civil market in the year 2015-16. The case has been handed over to CBI for investigation and prosecution sanction has been issued as requested by CBI in case of officials of CSD.

During oral evidence also the matter regarding CSD items reaching to local market were raised. The Committee are of the view that considering the size of the organization, the cases are miniscule but as this organization is with the Armed Forces, perfection in every aspect is expected with zero tolerance in the cases of irregularity. The Committee, therefore, desire that CSD should be very cautious in appointment of officials at the sensitive positions so such cases do not recur. Also, foolproof mechanism keeping in view the changing scenario be developed to check instances of this nature. This should be on-going exercise and due precautions should invariably be taken.

Reply of the Government

To address the issue, the following measures have been adopted:

- (a) Officers are rotated as per transfer policy.
- (b) Depots are inspected frequently by CSD officers.
- (c) CCTV installed in Depots & HO.
- (d) Entry of visitors is restricted.
- (e) Display of Vigilance direction on prominent places in Depots & HO.
- (f) Each complaint is being investigated even if pseudonymous/anonymous, considering merit in the complaint.
- (g) Automation exercise is in advanced stage and this will bring in more transparency in the CSD's functioning.

Quality of items supplied by CSD

Recommendation No. 57

During evidence, the Committee note that 80 per cent of the items, which are being supplied to the canteen, are coming from the top-end companies like HUL, P&G and Nestle. However, the Committee are concerned to note that despite that the items supplied to CSD are not above the bar and issues related to inferior quality are often experienced by the personnel. Therefore, the Committee, in this regard, recommend that more quality checks should be performed before the items enter the supply chain of the CSD. The Committee may be apprised of the action taken in this regard. Also, the feedback from the users be regularly taken and their suggestion be viewed seriously to constantly improve the existing supply chain management eventually leading to better quality products having been placed before the users.

Reply of the Government

Following measures are in place to ensure quality of items supplied by CSD:

- (i) Quality check is ensured before the item is entered into CSD.
- (ii) Food/beverage items are checked by Govt. Approved laboratories.
- (iii) Supplier's factory premises are inspected.
- (iv) For food/beverages, factories are inspected additionally to ensure they meet prescribed sanitary & Hygiene conditions.
- (v) Provision is given on CSD website to provide feedback/complaints by users.
- (vi) Before any item is introduced in CSD, the same is examined by a Committee consisting of official including members nominated by a committee, from the three services and item is introduced based on the feedback and after following due procedure in vogue.
- (vii) Based on feedback, CSD approaches firms for enlistment of items.
- (viii) Vendors are asked to take corrective steps in the light of feedback received from CSD beneficiaries.

Online presence of CSD

Recommendation No. 58

During discussion on examination of Demands for Grants 2019-20, the Committee pointed out the stiff completion being faced by CSD from other online retailers. The Committee find that 34 depots and the 4,000 Unit Run Canteens of CSD are being integrated online and post automation, it would be easy for CSD to go online and give services all over the country. The Committee sincerely wish and hope that these services are commenced shortly and Service personnel, their families and Ex-Servicemen (ESM) can benefit from it. For fulfilling this purpose, the Committee recommend that the Ministry may take services of Department of Posts for delivering the items in far flung areas as Indian Post has acknowledged presence throughout the length and breadth of the country.

Reply of the Government

- (a) As per vision document prepared by MoD, in consultation with all the stakeholder on CSD matter, 'automation of CSD' has been planned with a view to extending online facility to the CSD beneficiaries across India. Accordingly, automation exercise is actively under way to:-
- (i) Facilitate online sale of 'Against Firm Demand (AFD)' items.
 - (ii) Create an e-commerce platform to ensure that supplies reach the beneficiaries at their door step.
 - (iii) Provide unhindered online access to CSD beneficiaries.
- (b) Automation exercise will subsequently also aim at bringing complete automation in other areas of logistic/administrative establishment pertaining to CSD Head Office as well to bring in more transparency and better inventory management, besides reducing process time in day to day functioning.
- (c) The progress of the project is being continuously reviewed vigorously at regular intervals at the highest level in MoD.

WELFARE OF EX-SERVICEMEN

Resettlement Opportunities

Recommendation No. 59

The Committee note that various opportunities/schemes are available for the retired Officers and Personnel Below Officers Rank (PBOR) for their resettlement. These include reservation in Central/State Government Ministries/Departments, Nationalised Banks and Defence Security Corps. Directorate General of Resettlement (DGR) sponsors Ex-Servicemen (Officers) to various Government organizations, Public Sector Undertakings, Corporate Houses, Private Sector, Central Para Military Forces etc. The self-employment schemes to assist Ex-Servicemen (ESM) for transition to civil jobs are allotment of Bharat Petroleum Corporation Limited (BPCL)/ Indian Oil Corporation Limited (IOCL) Company Owned Company Operated (COCO) Outlets/ Retail Pumps to ESM (Officers) and Junior Commissioned Officers (JCO), Management of CNG Stations by ESM(O), Allotment of Regular LPG Distributorship, empanelment in Private Security Agencies and State ESM Corporations for providing security guards to various Central Public Sector Undertakings, Corporate Houses, Private Sector Undertakings etc., ESM Coal Loading and Transportation Scheme, allotment of Mother Dairy Milk Booths and Fruit & Vegetable (Safal) Shops in NCR, and allotment of regular/rural Retail Outlet Dealership by the Ministry of Petroleum and Natural Gas. The Committee have been apprised that apart from the regular employment schemes of DGR, new avenues for employment opportunity for Ex-Servicemen are being explored in the Corporate Sector and High Security Installations. In this developing field, the Committee recommend that modalities developed by the Ministry in this regard may be finalized at the earliest under intimation to the Committee. Also the broad framework developed to make this proposal feasible be also shared with the Committee in addition to the timelines drawn to accomplish this new venture.

Reply of the Government

Seeking employment opportunities for Ex-servicemen (ESM) is one of the primary focus areas of DGR. Consistent efforts are made to reach out to various corporate houses to obtain job for Ex-servicemen at all levels. Details are as under:-

(a) **MoU with CII in 2014**. DGR signed an MoU with CII in 2014. Post signing of the MoU, CII has assisted DGR in organizing and enabling corporate presence in 27 Job Fairs that have been conducted in different parts of the country. Approximately, 971 Corporate Houses / PSU's and 35,118 ESM participated in the said Job Fairs.

(b) **MoU with FICCI**. MoU with FICCI has been signed on 27 Jan 2020 which will further assist in approaching the Corporate Houses for employment of ESM.

(c) DGR will continue to strive hard to liaise with major Corporate Houses and urge them to get into MoU so that formal arrangements can be made for creating jobs for ESM.

2. As regards employment opportunities for high Security/installations, guidelines for functioning of DGR scheme to provide ESM manpower for 'Technical Services' to Government Establishments/Complexes through DGR Empanelled State ESM Corporations have been issued on 6.2.2020. The new scheme will open new employment avenues for ESM besides other existing self employment schemes.

Recommendation No. 60

The Committee had desired to be intimated of the details of applications received in each of the last five years requesting for resettlement of retired officers and PBOR through DGR. They further desired to know the number of actually resettled applicants out of the total number of applications so received. In response, the Ministry has furnished details of employment generated by the DGR under various Schemes during last five years (i.e. 2014-18). The number of ESM covered under DGR Security Agency, ESM Coal Company, Management of CNG, COCO Schemes, Mother Dairy Milk Booths/Safal Booth Schemes and ESM Placement by DGR (Employment directorate) in 2018 is 648, 80, 40, 21, 329 and 11315, respectively. However, the information regarding applications received in each of the last five years requesting for resettlement of retired officers and PBOR through DGR has not been made available to the Committee. The Committee, therefore, recommend that in order to gauge the efficacy of various resettlement schemes/opportunities provided by DGR, the requisite details may be furnished within one month of the presentation of this Report.

Reply of the Government

Details of ESM registered and sponsored for Govt sponsored re-settlement schemes are given below.

DETAILS OF ESM SPONSORED / EMPLOYED DURING LAST FIVE YEARS : DGR

Details of ESM registered and sponsored for Govt sponsored re-settlement schemes are as under:-

Sl. No.	Scheme	2015	2016	2017	2018	2019	Remarks										
(a)	Security Agency Empanelled. *	322	325	458	648	1289	<p>Number of ESM Officers Registered with DGR (for all Schemes*)</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> </tr> </thead> <tbody> <tr> <td>479</td> <td>562</td> <td>581</td> <td>106</td> <td>1007</td> </tr> </tbody> </table> <p>* These figure are representing number of ESM registered with DGR for various schemes i.e. DGR Security Agency, ESM Coal Company, Management of CNG and COCO Schemes.</p> <p># ESM Guards are directly picked up by the Security Agency from the environment (ZSB/ Placement Cells). DGR only allocates the number of Guards to be employed based on the requisitions.</p>	2015	2016	2017	2018	2019	479	562	581	106	1007
	2015	2016	2017	2018	2019												
	479	562	581	106	1007												
Number of ESM Sponsored#	23627	40863	33394	35558	42289 (Approx)												
(b)	Coal Companies Sponsored/ ESM Sponsored#	05/ 25	13/ 65	04/ 21	16/ 80	05/ 28	# Approx 2700 ESM are registered for Tipper Scheme who will be allocated this re-settlement scheme based on demand from Coal India Ltd (CIL).										
(c)	ESM & Widows/ Disabled ESM attached in ESM Coal Companies.\$	220	213	194	361	250 (JCOs/OR) 20 (Widows /Disabled)	\$ Age embargo for widows has been taken off and all widows registered with DGR get benefit of the scheme subject to fulfillment of QR. The sponsorship is based solely on the requisitions from CIL and resulting in formation of ESM Coal Company.										
(d)	Management of CNG	31	45	35	40	57	This is an ESM (Officer Brigadier & below) based scheme and all those selected through an interview by IGL/ MNGL get the benefit of the scheme. DGR only sponsors names of registered officers as per the requisitions. Those not selected have the option to switch-over to other re-settlement scheme.										
(e)	COCO Scheme (For BPCL/ IOCL/ HPCL)	131	29	66	21	14	This is an Officer/ JCOs (ESM) based scheme and all those selected through an interview by Oil Companies get the benefit of the scheme. While officers (ESM) register with DGR but JCOs (ESM) register their name for this OPA scheme through their parent Rajya Sainik Board / ZilaSainik Board. The sponsorship is based solely on the requisitions from the Oil Companies.										
(f)	Issue of Eligibility Certificates for allotment Oil Product Agencies	9	18	384	180	146	Eligibility Certificates are issued to applicants who fulfill the QR. Thus, the numbers of ESM issued with Eligibility Certificates are the actual number of ESM registered for OPA Scheme under 8% reserved quota for allotment of Regular/Rural Retail Outlet Dealership under, 'CC1' category. The final allotment is done through a 'draw of lots'.										

(g)	Mother Dairy Milk Booths/Safal Booth	303* 578#	296* 621#	320* 581#	329* 691#	354* 765#	<p>This is an ESM (JCOs/ OR) and their equivalent centric scheme and all those selected through an interview get benefit of the re-settlement scheme.</p> <p>* Number of ESM Selected for Mother Dairy Milk Booth and Safal Fruit & Vegetable Shops.</p> <p># Number of ESM registered for Mother Dairy Milk Booth and Safal Booth. All are sponsored by DGR for a/m two schemes.</p>
(h)	Army Surplus Class-V 'B' Vehicles	67	39	33	11	**	<p>This scheme is based on requisitions / state of availability of Class-V 'B' vehicles with the MGO Branch (Army). DGR only forward the applications of eligible ESM to MGO Branch for preparation of a seniority list for allotment of Vehicles.</p> <p>** Scheme is being fore-closed due to security & environmental concerns.</p>
(j)	ESM Placement by DGR (EmpDte)	5263	5126	9604	11315	9706	<p>This re-employment scheme is based on requirements placed by PSU/Govt offices for both officers and JCOs/ OR and their equivalent in Air Force and Navy. DGR sponsors the names of all those who fulfill the QR to the Requisitioning Agency/ Deptt. Thereafter, ESM are selected through an interview. DGR directly receives names of applicant (officers), while JCOs/ OR (and their equivalents) names are selected/ routed through KSB/ RSB/ ZSB to DGR.</p>

Recommendation No. 61

The Committee also recommend that in each State, a retired Officer of the rank of Brigadier and above should be appointed as Advisor on Veterans' Affairs to liaison with Government on the issues connected with welfare of Ex-Servicemen.

Reply of the Government

There is a provision of appointing a retired Brigadier/Equivalent officer as the Director of the Rajya Sainik Board (RSB) in each State/UT who advises and liaison with the State Govt on issues connected with the welfare of Ex-Servicemen (ESM). The officer has been appointed by fourteen State Govts/UTs.

2. Seventeen States/UT have an ESM functioning as an adhoc Director in lieu of Brigadier. The Kendriya Sainik Board (KSB) has been constantly approaching the State Govt to appoint a Brigadier level officer.

3. Two States/UTs i.e. Arunchal Pradesh and Puducherry have civilian State Govt official functioning as an adhoc Director in lieu of a Brigadier. In this case also the KSB has constantly reiterated the need to appoint a Brigadier (Retd.), to function as the Director, RSB to be able to render suitable advice to the State Govt/UT.

EX-SERVICEMEN CONTRIBUTORY HEALTH SCHEME (ECHS)

Budgetary provisions

Recommendation No.62

The Committee note that ECHS has been allocated Rs 3,281.26 crore under Revenue (BE) Head, against the projection of Rs 5,733.50 crore in 2019-20. Also, against the projection of Rs 35 crore for capital expenditure, Rs 13.97 crore have been allocated for 2019-20 BE. The carried forwarded liability in the current financial year is Rs 2,130 crore. Further, an additional amount of Rs 3,500 crore is projected to be required for expenditure on medical stores, medical treatment and other miscellaneous items like salary. Considering that ECHS has the responsibility to look after medical needs of 55 lakh persons including veterans and their dependants, the Committee recommend that requisite funds should be allocated to ECHS at Revised Estimates or Supplementary Grants stage.

Reply of the Government

An additional amount of Rs 1591.03 crore has been allotted to ECHS under Revenue Head at RE stage vide DGFP letter No 88896/Gen/GS/FP-2 dated 20.1. 2020.

Medical bills pending with ECHS

Recommendation No. 63

The Committee have been apprised that under ECHS, approximately Rs 2,200 crore of medical bills of empanelled hospitals are pending for reimbursement, out of which bills of Rs 900 crore are approved. The managing Director, ECHS, while tendering his evidence, stressed on the need for additional funds to continue the Scheme without any strings. Since this non-reimbursement/ delay in reimbursement of medical bills may cause reluctance on part of some empanelled hospitals to admit patients under ECHS, the Committee impress and urge upon the Ministry to look into this issue by according it top priority and ensure that the bills are expeditiously cleared. The Committee also recommend that whatever system is there in place, it should be revisited to remove the bottlenecks so that the pendency is minimized. It should not be out of place here to mention this for internal purpose only, a Bill monitoring system be devised, if not in place already.

Reply of the Government

The pendency of medical bills of empanelled hospitals is not due to any bottleneck in the system but had arisen due to non availability of sufficient funds at BE stage under Code Head 365/00 (Medical Treatment Related Expenditure). An additional amount of Rs 1591.03 crore has been allotted to ECHS under Revenue Head at RE stage vide DGFP letter No 88896/Gen/GS/FP-2 dated 20.1.2020 out of which an amount of Rs 1466.03 Crore has been allotted under Code Head 365/00 and the same will be utilized to clear the pending bills worth Rs 1473.54 crore which are ready for payment. The bills payment position being computerised is already being mentioned at various levels.

New proposals

Recommendation No. 64

The Committee have learnt that a proposal regarding Veterans Hospital, its financial viability, profit or loss considerations as compared to empanelled hospitals etc. is under consideration in Service Headquarters. Further, proposal regarding merger of military hospitals with existing Polyclinics is under examination. The Committee sincerely hope and recommend that decision on the said proposals is taken at the earliest keeping in mind amelioration of the medical services provided to our veterans and their dependents. They desire that further updates on these issues are intimated at the time of furnishing Action taken Replies by the Ministry.

Reply of the Government

The feasibility of merger of Military Hospitals with some co-located Polyclinics is under examination.

Issue of specialized doctors under ECHS

Recommendation No.65

During the deliberations, the Committee raised the issue of disinclination of private empanelled hospitals to admit patients under ECHS due to the lower rate of specialized doctors fixed in ECHS as compared to other health Schemes. The Managing Director, ECHS clarified during his deposition that the Central Government Health Scheme rates for each procedure are also followed by ECHS. He further submitted that whenever cases of wrongful denial of empanelled hospitals to ECHS beneficiaries are officially reported, action is initiated against the hospitals as per the provisions in the Memorandum of Agreement. The Committee recommend that clear and strongly worded advisories should be communicated to the empanelled hospitals in this regard. They also desire that details of officially reported cases of refusal of treatment of ECHS beneficiaries by ECHS empanelled hospitals and action initiated against them by the Ministry of Defence during last five years may be furnished to the Committee at the earliest.

Reply of the Government

Hospitals empanelled with ECHS and on any denial of service by these hospitals are considered as violation of MoA. On occurrence of such cases, Regional Centre, ECHS at respective locations, issue 'SHOW CAUSE' Notice to Hospitals asking for their explanation for refusal of service. It is prudent to inform that nearby 100% of such refusals by hospitals is on account of payment pendency, i.e. not receiving their outstanding dues for the claims raised by the Hospital. Refusal is purely restricted to stopping cashless service, otherwise, ECHS beneficiaries are allowed to undergo treatment but only on credit basis. Moment some allotment is made to the Hospitals for their bills pendency, hospitals resume cashless services. Therefore on issue of 'SHOW CAUSE' Notice to hospitals and the remittance to hospitals, the period being very small, hence such cases are resolved at Regional Centres without they being referred to MoD (DoESW). In the last five years, there is only one hospital namely ES Hospital Villupuram (Tamil Nadu) which was referred to MoD (DoESW) in October 2018 and the dis-empanelment order was issued on 15.2.2019.

Expansion of ECHS

Recommendation No.66

The Committee observe that Fixed Medical Allowance (FMA) has been granted to all ECHS beneficiaries who are residing in far flung areas where Polyclinics are not available. Keeping in view the rising cost of medicare and non availability of healthcare facilities in remote areas of the country, the Committee recommend that the Ministry of Defence should make all sincere efforts to provide the facilities of mobile Polyclinics, other relevant emergency medicare facilities, particularly for women and children, on priority basis.

Reply of the Government

Fixed Medical Allowance (FMA) has already been authorized w.e.f. 01 November 2018 to all ECHS beneficiaries who are residing in districts not covered by ECHS including far flung areas where Polyclinics are not available. A proposal for opening of 102 New Polyclinics all over India including far flung areas is also under consideration. Under the scheme there is provision for Mobile Polyclinics for catering to requirements of far flung areas. 17 Mobile Polyclinics have been

sanctioned in the States/UTs of Uttarakhand, Karnataka, Himachal Pradesh, Assam, Arunachal Pradesh, Punjab, Madhya Pradesh, Jammu & Kashmir, Ladakh and West Bengal.

DEFENCE PENSION

Budgetary Provisions

Recommendation No. 67

Defence Pensions provides for pensionary charges in respect of retired Defence personnel (including Defence civilian employees) of the three services viz. Army, Navy and Air Force and also employees of Ordnance Factories etc. It covers payment of Service pension, gratuity, family pension, disability pension, commuted value of pension, leave encashment etc. The Committee have learnt that the amount allocated for BE 2018-19 in respect of Defence Pensions is Rs.1,12,079.57 crore, which is Rs. 5,304.43 crore more than the allocation of the previous year at Revised Estimates stage. They note that the Defence Pension liabilities will continue to increase exponentially every year due to increase in number of retirees, amount of Dearness Relief, Gratuity, Family Pension, Leave Encashment and Retirement Benefits. The Committee understand that Defence Pension is a significant retirement benefit for those who serve our country, however, burgeoning pension bill is a cause of concern. As mentioned in the earlier recommendation, the Defence Secretary submitted that while the budget in Defence Services Estimates has doubled in the past decade, pension has increased thrice in amount which has led to deficiency of funds in the requisite critical areas. For this financial year i.e. 2019-20, Defence Pensions has claimed 26 percent i.e. Rs. 1,12,079.57 crore of the total budget for the Ministry of Defence for 2019-20 i.e. Rs. 4,31,010.79 crore. Therefore, the Committee recommend that the Ministry of Defence, along with the Services, DRDO, OFB and DPSUs, should prepare a roadmap for generating and increasing sources of revenue to compensate for the rising financial liability due to Defence pension.

Reply of the Government

Grant of Pension to the retired Defence Forces personnel is a statutory requirement. DESW is mandated to formulate a policy in this regard. The Committee has recommended that the Ministry of Defence, along with the Services, DRDO, OFB and DPSUs, should prepare a roadmap for generating and increasing sources of revenue to compensate for the rising financial liability due to Defence pension. The observations of the Committee are noted.

One Rank One Pension (OROP)

Recommendation No. 68

One Rank One Pension (OROP) was implemented for the Ex-Servicemen w.e.f. 01.07.2014. OROP implies that uniform pension be paid to the Defence Forces Personnel retiring in the same rank with the same rank with same length of service regardless of their date of retirement. It aims at bridging the gap between the rates of pension of current and past pensioners at periodic intervals. The committee have learnt that a sum of Rs. 10,795.4 crore has been disbursed up to 30.9.2017 (data compiled till 1.5.2018) to Ex-Servicemen/Family pensioners on account of implementation of OROP. During deliberations of the Committee in connection with examination of Demands for Grants 2019-20, the issue of pending cases of settlement and anomalies regarding OROP was discussed. The Secretary, Defence Finance apprised the Committee that the implementation of OROP is done by Controller General of Defence Accounts (CGDA). Regular Pension Adaalats' are held in each State and cases are settled there across the Board. The Committee desire that factual details regarding these 'Pension Adaalats' including inter alia the States covered so far, applications received, cases settled, number of pending cases, duration in which pension disbursed after case is settled in 'Pension Adaalat' etc., should be intimated to them within three months of the presentation of this Report. Based on these facts and figures, the Committee would like to form any definitive view. Further, an online platform dedicated to the grievances regarding OROP may be made available by the Ministry of Defence to enable resolving of anomalies and address discontent regarding implementation of the scheme.

Reply of the Government

Pension Adaalats: Pension Adaalats are held by CGDA. It is intimated that 173 Defence Pension Adaalats have been held so far across the country since 1987. Following is the year-wise details of Pension Adaalats held in different States:-

Sl. No.	Year of Adaalat	No. of Adalats held	States/U.Ts. covered
1.	1987	2	Punjab, Tamilnadu
2.	1988	12	Andhra Pradesh, J&K, Delhi, Kerala, U.P., Maharashtra, West Bengal, H.P., Rajasthan
3.	1989	4	Haryana, Karnataka, U.P., Tamilnadu
4.	1990	0	---
5.	1991	4	West Bengal, Hayana, Punjab, Kerala
6.	1992	2	U.P., Tamilnadu
7.	1993	0	---
8.	1994	2	Karnataka, Telangana
9.	1995	5	Kerala, Punjab, J&K, Tamilnadu, U.P.
10.	1996	4	Madhya Pradesh, Bihar, H.P., Rajasthan

Sl. No.	Year of Adaalat	No. of Adalats held	States/U.Ts. covered
11.	1997	4	Kerala, U.P., Maharashtra, Jharkhand,
12.	1998	2	Punjab, Uttrakhand
13.	1999	5	U.P., Karnataka, Uttrakhand, Maharashtra, Punjab
14.	2000	3	Tamilnadu, Karnataka, Haryana
15.	2001	3	Rajasthan, Kerala, Uttrakhand
16.	2002	2	Telangana, West Bengal
17.	2003	7	Tamilnadu, Chandigarh, J&K, U.P., H.P., Kerala, Maharashtra
18.	2004	5	Andhra Pradesh, West Bengal, Karnataka, Rajasthan, U.P.
19.	2005	7	Haryana, Gujarat, Kerala, Uttrakhand, J&K, Bihar, Maharashtra
20.	2006	6	Meghalaya, Maharashtra, West Bengal, J&K, Punjab, Tamilnadu
21.	2007	5	Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Andhra Pradesh
22.	2008	5	Jharkhand, Goa, Assam, Chhatisgarh, Tamilnadu
23.	2009	7	Punjab, Gujarat, Andhra Pradesh, Maharashtra, H.P., Kerala, Punjab
24.	2010	6	U.P., H.P., Punjab, Karnataka, Rajasthan, Assam,
25.	2011	7	Kerala, Andhra Pradesh, U.P., Punjab, Maharashtra, Haryana, Rajasthan
26.	2012	6	Andhra Pradesh, U.P., Punjab, H.P., Uttrakhand, Kerala
27.	2013	6	Rajasthan, Punjab, Karnataka, Jharkhand, Assam, Haryana
28.	2014	6	Madhya Pradesh, Chhatisgarh, Tamilnadu, Meghalaya, Odisha, Gujarat
29.	2015	10	Uttrakhand, J&K, Kerala, Andaman & Nicobar, Punjab, Maharashtra, H.P., Tamilnadu, Assam
30.	2016	7	Kerala, Maharashtra, Uttrakhand, Madhya Pradesh, Punjab, Karnataka, Mizoram
31.	2017	8	Nagaland, U.P., Goa, Andhra Pradesh, Rajasthan, Haryana, Kerala
32.	2018	11	Bihar, Rajasthan, H.P., Tamilnadu, J&K, Punjab, Karnataka, Uttrakhand, Sikkim, Maharashtra
33.	2019	10	Karnataka, Rajasthan, Assam, Nagaland, Jharkhand, Chandigarh, H.P., Kerala, U.P., Haryana
34.	2020	0	---
	Total	173	

The status of complaints received in Adalats in last 3 years viz. from 2017 onwards is as under:-

No. of Adalat held from 2017	No. of complaints received in these Adalats	Cases settled	Outstanding complaints
27	13627	12076	1554

An online platform dedicated to the grievances regarding OROP: There is a separate category for grievances regarding OROP policy issues in the CPGRAMS. Grievances registered by individual and associations on this portal are examined as per the extant policies and replies are sent to the petitioners in a time bound manner.

SAINIK SCHOOLS

Budgetary provisions

Recommendation No. 69

The Committee note that Central Govt, State Govt. and Parents are the stake holders in funding of the Sainik Schools. While the Central Govt provides for defence scholarships, NDA incentives, fee and dietary subsidy, IT & training grant and grant-in-aid for infrastructure development, the State Govt. provides for land building, maintenance and scholarships. There is no separate budget for the Sainik Schools in Defence Budget and they get the money from the Army Budget itself. Further, as against a projection of Rs. 114 Crore, the Sainik Schools have been allocated Rs. 40 Crore for 2019-20, a shortfall of Rs 74 Crore. It is appalling for the Committee to find that Sainik Schools have been given meager 35 percent of the projected budget. The Committee are of the view that such cuts in the allocation will definitely lead to compromise with the quality of the training and education system of the cadets of Sainik Schools, therefore, they desire that allocation as per the projection should be provided to them.

Reply of the Government

The Executive Committee in its meeting held on 17th March, 2020 has resolved that 'In view of the need of consistent and timely flow of shareable funds to the Sainik Schools, it is imperative that a separate budget code head/ sub head be created for the purpose and funds allocation henceforth be done under such created head/sub-head.' The process has been initiated vide F.No. 33(01)/2019/D(SSC) on 21.05.2020 for creation of separate budget head for Sainik Schools Society.

Recommendation No. 70

The Defence Secretary, while tendering his evidence before the Committee, pointed out the challenges faced by the Sainik Schools due to lack of requisite funds. He submitted that although the performance and standard of Sainik Schools has improved, the main constraint is paucity of funds due to rise in salary of teachers and staff and non-contribution of share by some State

Governments. Considering that the main objective of Sainik Schools is to prepare cadets for entry into the Forces, the Committee recommend that necessary financial help should be extended to the Sainik Schools by the Ministry of Defence and the State Govts be vigorously pursued to contribute their share too in maintenance of the Schools.

Reply of the Government

The Ministry has taken note of the observation of the Hon'ble Committee.

Recommendation No. 71

The Committee have been apprised that a committee has been formed to solve the funding requirements of the Sainik Schools. The latest development in this regard should be intimated to the Committee within one month of the presentation of this report.

Reply of the Government

A Committee was constituted on 23rd July, 2019 in the Ministry to critically review the functioning of the Sainik Schools. The Committee has submitted its report on October, 2019. The Committee, inter-alia, has recommended that a budget committee will be formed within the revised structure of Sainik Schools Society. To strengthen the funding position of Sainik Schools a proposal for opening a separate budget head has been mooted. Also a proposal for constituting a budget sub-committee to manage dispersal of funds and determine allocation of funds to each school is under consideration.

Board of Governors

Recommendation No. 72

The Committee have learnt that a Board of Governors, functioning under the Chairmanship of the Raksha Mantri, is the Chief Executive body of the Sainik Schools Society. The Chief Ministers or the Education Ministers of the States in which the Schools are located, are among the members of the Board of Governors. During the oral evidence of the representatives of the Ministry of Defence, the Committee desired to be apprised of the number of meetings of the BoG in a year. The Inspecting Officer, SSS replied that the meeting is held every year and the last meeting was held in March 2018, last year. The Committee are dismayed to note that the annual meeting of the BoG for 2019 has not been held yet. Keeping in view the fact that the meetings are necessary for monitoring and reviewing the important affairs of the Sainik Schools and ensure synchronization between Centre, State and the Sainik Schools, the Committee desire that the meetings of the BoG should be held according to the schedule without any delay and they be apprised accordingly.

Reply of the Government

The Ministry has taken note of the observation of the Hon'ble Committee and accordingly meeting of Board of Governors (BoG) was scheduled and held on 10.01.2020.

Admission of Girl Students in Sainik Schools

Recommendation No. 73:

The Committee in their twentieth Report (16th Lok Sabha) had recommended the Ministry of Defence to seriously look into the matter of admission of girl students in Sainik Schools and initiate the process of creating requisite infrastructure. They are pleased to learn that approval has been given to admit girls in the Sainik Schools. The Committee have been apprised that admission of girl students will begin in the schools where necessary infrastructure such as separate toilets etc. is available or being constructed. The Committee feel that entry of girl in Sainik schools is a step forward in the right direction towards greater gender inclusiveness and equality in the country and desire that efforts should be intensified to facilitate admission of girls in Sainik Schools throughout the country. The details regarding provision of infrastructure in this regard in all the existing and proposed Sainik Schools should be intimated to the Committee within one month of the presentation of this report.

Reply of the Government

Based on the success of the Pilot Project for admission of girl children in Sainik School, Chhingchhip in Mizoram for two years from the academic session 2018-2019, the Govt has decided to continue girls admission in Chhingchhip and also to implement the decision of admission of girl children in other Sainik Schools. Admission of girl children in 05 Sainik Schools viz Kalikiri (Andhra Pradesh), Kodagu (Karnataka), Ghorakhal (Uttarakhand), Chandrapur (Maharashtra) and Bijapur (Karnataka) has been approved and admission process is under way for admission from academic session 2020-21. In remaining Sainik Schools of the country admission of girl children will be implemented from the academic session 2021-22.

2. The following steps are being taken by the Sainik Schools for smooth induction of the girl cadets in to class VI w.e.f 2021-22:-

(a) A separate hostel with barbed wire fencing has already been provided in Sainik School, Chhingchhip for the girl cadets to ensure their safety. Similar facilities are also proposed to be provided in other Sainik Schools.

(b) To ensure the security and well being of girl cadets in hostel, the following personnel are to be placed on roll to look after the girl cadets exclusively as being followed in Sainik School, Chhingchhip:-

i) One Matron cum Physical Trainer to facilitate the training/safety of girl cadets.

- ii) One Nursing Sister for the medical requirements for the cadets.
 - iii) Two female General Employees for housekeeping and maintenance of Girls Hostel.
- (c) Separate washrooms to be provided to the girl cadets in the Hostel, Sports field, auditorium, mess and academic block for their convenience and ease.
- (d) CCTV cameras to be installed at appropriate locations for the safety of girl cadets.
3. Similar training opportunities for the girl cadets as being permitted to the boy cadets are envisaged.

Intake of Sainik School Students into National Defence Academy

Recommendation No. 74

The committee notes that currently course strength of NDA is 341, out of which 87 Sainik School students were selected for 2018-19. The Inspecting Officer, Sainik Society, informed the committee that on an average there are 600 vacancies in NDA. These are filled by approximately 250 cadets of Sainik Schools, Rashtriya Military Schools, Rashtriya Indian Military College and approximately 350 civilian students from the entire India. Perceiving that raising new Battalions in NDA would have the dual advantage of removing the shortage of Officers in the Forces and giving better opportunities in terms of numbers to be able and desirous candidates, the committee in their Sixteenth Report (15th Lok Sabha) had recommended that the proposal for raising 5th Battalion of NDA be considered as a priority and all clearances etc. be obtained within a timeframe. In this regard, the exact figures regarding number of Battalions and Squadrons, proposal for raising new Battalions/ Squadrons should be furnished to the committee at the time of furnishing the Action Taken Replies.

Reply of the Government

The strength of trainees at NDA as on 30 May 20 is 1941 cadets. The other details are as follows: -

- (a) National Defence Academy (NDA) currently has the capacity to train 2100 cadets in five battalions, wherein four battalions have four squadrons each and the fifth has only two squadrons.
- (b) At present two squadrons of the fifth battalion are functioning out of temporary accommodation arrangements and utilising the existing training infrastructure.
- (c) Approval of GoI/MoD for 'Raising of the 5th Battalion' at NDA was accorded vide GoI/MoD letter No IDS/40027/38/Adm(PC)/AFTI/NDA/421/D(GS-II)/2017 dt 20 Apr 17.
- (d) The work on the remaining two squadrons will be completed in the next 4-5 years, after which the capacity at NDA will enhance to 2400 cadets.

- (e) With the commissioning of the complete complement of the 5th Battalion, the training capacity at NDA will go up to 2400 cadets.

Even Expansion of Sainik Schools

Recommendation No. 76

Another area in regard to Sainik Schools on which the Committee would like to recommend is the expansion of Sainik Schools in remote and far flung areas such as Tribal belts, remote hills and geographical areas where no Sainik Schools has been hitherto established. In the Committee's opinion, there is no dearth of talent in the remote areas but the candidates residing in such areas need to be given an opportunity to prove their worth and serve the country by joining the Forces. The Committee, therefore, recommend that in the first instance, such areas be identified and thereafter, the follow-up action including consultations with the State Governments/other Stakeholders be effectively carried out in order to achieve this goal.

Reply of the Government

Sainik Schools are established on receipt of a request from State Government agreeing to provide land along with funds for the creation and maintenance of basic infrastructure, purchase of equipment and other facilities besides scholarships for the cadets belonging to the State. On receipt of proposal from the State Govt., an inspection of the proposed site is carried out by the officials of Sainik Schools Society to ascertain its suitability. Therefore, opening of new Sainik Schools in any part of the country depends upon the demand raised by the concerned State Government. As of now there are four Sainik Schools namely Sainik Schools, Goalpara (Assam), Pungalwa (Nagaland), Imphal (Manipur) and Chhingchhip (Mizoram) functioning in remote hills. No proposal for tribal areas has been received from the States. But as and when such proposals are to be received in the Ministry it will be considered favorably within specified parameters.

B) OBSERVATIONS/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT AND ARE COMMENTED UPON

Projections made by the three Services

Recommendation Nos. 9-11

The Committee deduce from the data supplied to them that the figures of allocations to the Services are much lower than what they had projected at both Budget Estimates (BE) and Revised Estimates (RE) stage. Moreover, the Services have been mostly able to spend the amounts allocated at the stage of RE. For the previous financial year i.e. 2018-19, at the stage of BE, the Army projected a requirement of Rs. 1,96,387.36 crore for both Revenue and Capital expenditure, but was given only Rs. 1,53,875.22 crore. At the Revised Estimates stage of that year, the Army projected an amount of Rs. 1,83,071.32 crore but was allocated only Rs. 1,56,628.05 crore. In 2018-19, the Army spent 103.2 percent of the budget provided i.e. Rs. 1,61,680.04 crore. In the case of Navy, the projected amount was Rs. 59,443.16 crore for both Revenue and Capital. However, only Rs. 40,419.53 crore were provided at BE Stage. At the Revised Estimates stage of the year, the Navy projected an amount of Rs. 55,156.23 crore but was allocated only Rs. 41,685.91 crore. Of this, the Navy spent 101.63 percent of the budget provided i.e. Rs. 42,365.83 crore. Similarly, while the Air Force projected a requirement of Rs. 1,12,955.53 crore, quite surprisingly, only Rs. 64,591.44 crore was allocated at BE stage. At the stage of Revised Estimates of the year, the Air Force projected an amount of Rs. 1,00,986.83 crore but was allocated only Rs. 63,875.60 crore. of this, the Air Force was able to spend more than 101.35 percent of the budget provided i.e. Rs. 64,742.99 crore. The Committee are satisfied to note that the Forces have been able to completely utilize the budgetary allocation.

Further, the Committee find that for the Budget Estimates 2019-20, the Army projected an amount of Rs. 1,57,896.23 crore under the Revenue Head, but has been allocated only Rs. 1,40,398.49 crore. Under the Capital Head, the projected amount is Rs. 44,690.98 crore but only Rs. 29,511.25 crore has been allocated, which amounts to 66 percent of the projected requirement. Again, for the current year 2019-20, while the Navy projected a requirement of Rs. 27,086.29 crore, the allocated amount has been Rs. 22,211.71 crore under the Revenue Head. Under the Capital Head, while the Navy projected an amount of Rs. 37,220.98 crore, the allocated amount is only Rs. 23,156.43 crore, which amounts to approximately 62 percent of the projected requirement. While an amount of Rs. 34,849.50 crore has been projected as the requirement under the Revenue Head by Air Force, Rs. 29,601.69 crore has been provided. Under the Capital Head, while the Air Force projected a requirement of Rs.74,894.56 crore, the allocation has been only Rs. 39,347.19 crore.

The Ministry of Defence in their written submissions to the Committee stated that the requirements projected by Services are proposed to the Ministry of Finance for favourable consideration. While allocating funds, the Ministry of Finance analyses past absorption capacity of the Services and the pace of expenditure in the current Financial Year. The Committee understand that if this logic is applied, there is no reason with the Ministry of Finance not to allocate requisite budget for the Forces as for the past few financial years they have been able to fully utilize the funds allocated to them at Revised Estimates stage. Moreover, while projecting their demands to the Ministry of Finance, the Services must have taken into account their capital and revenue expenditure to be met this year. Therefore, the Committee recommend that at least now the Ministry

of Defence, citing healthy trend of utilization of funds and critical requirements of operational preparedness of the Forces, should strongly press for additional allocation of funds to the Ministry of Finance at Revised Estimates stage.

Reply of the Government

In RE 2019-20, an amount of Rs. 4,12,088.42 crore i.e. additional amount of Rs.1,06,792.35 crore over BE 2019-20, was projected to Ministry of Finance under Defence Services Estimates (DSE). However, an amount of, Rs. 3,16,296.07 crore has been allocated under DSE by M/o Finance which is an increase of Rs. 11,000 crore over BE 2019-20 allocations. This increase comprises of Rs. 4000 crore under Revenue Head and Rs. 7000 crore under Capital Head.

The recommendation of the Committee has been noted and it is assured that projections / requirements of the Services will be forwarded to Ministry of Finance for favourable consideration. Further, the available resources will be optimally utilized based on prioritized requirements of the Services and all efforts will be made to ensure that critical requirements of Services are duly addressed.

[For comments, please see Para No. 10 of Chapter I of the Report]

Border Roads Organization

Recommendation No. 13

The Committee, through post-evidence replies, had sought information on certain points, which are mentioned in the narration part of this Report. The information was particularly sought on handing over of certain projects of Indo-China border roads to BRO; taking of the projects of lower areas, amendments in the Service Rules of BRO; installing of satellite dish for satellite monitoring of projects; plans for providing single-window formation for clearing the issues relating to road construction, possibility of providing imprest funds to BRO and on that of state of roads to be built in India which BRO has already built in friendly foreign countries, etc. The Committee has not received this information. Timely submission of information to the Committee is very important in framing the relevant recommendations as well as their forming a part of the Report. The Committee would like the Ministry to take this issue very seriously and, in future, all the information as sought by the Committee must be sent within the timelines. The points on which information is waited must be sent expeditiously so that they could at least be added in the Report at the time of finalizing of the Action Taken Report.

Reply of the Government

Noted for compliance. The status on various issues is summarized below:

(i) Handing over certain road projects: Based on the operational requirements of the Army and consequent upon the decision taken in the National Security Council meeting, it was decided that BRO may focus on core strategic functions on the borders. Accordingly, certain roads in the hinterland, which were earlier constructed by BRO and are now further required to be improved, were identified to be handed over to other agencies, so that BRO is able to utilize its resources

optimally for construction of roads, which are of strategic importance in the border areas and will meet the operational requirements of the Army.

Further, the decisions to hand over the roads to civil agencies are also taken in accordance with the National Highway Development Plan called “Bharatmala”. Subsequently some of the road stretches funded under Bharatmala Pariyojana which were transferred to BRO by MoRT&H are given below:-

Stretch of road	State	Length (km)
Askot-Dharchula-Tawaghat-Sirkha-Malpa-Garbyang-Lipu-Lekh Pass	Uttarakhand	62
Mana-Mussapani-Gasroli-Rattakana-Manapass		63
Joshimath-Malari		62
Bhaironghati-Nelang-Naga-Angar-PDA-Medikay		70
Simli-Gawaldam		47
Mangan–Kudyong-Chugthang-Lachung-Yumthang-Yume- Samdang border	Sikkim	90
Chugthang-Lachen-Monastery-Log bridge-Muguthang		59

The main reasons to hand over these roads stretches to BRO by MoRT&H/NHIDCL are that roads are located in high altitude and snow bound areas where it may not be possible for NHIDCL to take up these roads through EPC mode of execution.

(ii) Service Rules: Officers and subordinates of BRO are governed by Central Civil Service (CCS) Rules. In addition to these rules, certain Departmental Rules, which are BRO specific, have been compiled under Border Road Regulations (BRR), which was last revised in 1993 and are further under revision.

(iii) Satellite dish for satellite monitoring of projects: GIS based digitization of road infrastructure software for the roads in the border areas to monitor the progress in the Border States is under progress, which is likely to be completed by 2020.

(iv) Imprest Funds: The idea to provide imprest funds has not been contemplated.

(v) Single window clearance: Single window system has been established at District, State & MoEF level to fast track, processing of forest clearance cases on 09 Jul, 2010.

(vi) State of roads to be built in India which BRO has already built in friendly foreign countries: Roads constructed by BRO in Bhutan and India are more or less similar. The roads are constructed by BRO in India as per the specifications stipulated by Indian Road Congress (IRC) codes whereas, the roads in Bhutan are constructed as per the specifications stipulated by Royal Government of Bhutan, Ministry of Works & Human Settlement, Department of Roads.

[For comments, please see Para No. 13 of Chapter I of the Report]

Construction of underwater tunnel

Recommendation No. 25

The Committee note that for the construction of underwater tunnel in Brahmaputra river, global tendering of Request for Proposal (RFP) for the same has been completed on 15 October, 2019 and the timeline to finish the work is 2028. The Committee are happy to know about this development, nevertheless they recommend that for such crucial works, BRO should adhere to the timelines and complete the work on schedule as envisaged by them. The role of the Ministry and other stakeholders such as State Government, Ministry of Environment and Forest, etc, is very crucial in accomplishing this project without registering any time and cost escalations. If required, the Ministry may constitute a monitoring committee for regular oversight in this regard under intimation of the Committee. They would also like to be apprised.

The Committee are also of the view that bridges on the rivers in North Eastern Region should be constructed at more than two places, so in case of one bridges is swept away due to natural fury, other option can be exploited. This move will definitely help in reducing the distance for the natives as well as help the forces to reach places in time.

Reply of the Government

Approval has been accorded to carry out the Feasibility study and Detailed Project Report (DPR) preparation for the underwater tunnel for road & rail connectivity across river Brahmaputra. Feasibility and Detailed Project Report (DPR) is expected to be completed in 24 months.

Regular review of EPC projects which includes the construction of underwater tunnel across Brahmaputra is done under the Chairmanship of JS (BR).

[For comments, please see Para No. 16 of Chapter I of the Report]

Non-Implementation of Central Government Schemes

Recommendation No. 36

The Committee are disappointed to learn that various central and state Government schemes are not being implemented in the Cantonment areas. The representatives of the Ministry of Defence candidly submitted before the committee that there is no resistance from their side in implementation of these schemes in cantonment areas. However, the State Government do not take into account the Cantonment Boards while formulating or implementing Schemes of Welfare for other municipalities. The Committee understand that under Section 10 of the Cantonment Act 2006, the cantonment Boards were declared as deemed Municipalities in accordance with Article 243 P of the Constitution for the purpose of receiving grants and allocations; or implementing the Central Government schemes of social welfare, public health, hygiene, safety, water supply, sanitation, urban renewal and education. Therefore, in their opinion, there is no reason that Central or State Government sponsored schemes may not be implemented in Cantonment areas. They

recommend that the Ministry of Defence should vigorously take up the matter with the state Government concerned so that benefits of such schemes are also extended to the population living in Cantonment areas, especially the Scheduled Castes/Scheduled Tribe/ BPL Beneficiaries, and they do not feel secluded from the rest of the country. Further, a committee may be formed comprising of all stakeholders i.e. representatives of the Ministry of Defence, Local Members of Parliaments and Members of Legislative Assembly, Directorate General Defence Estate (DGDE), Cantonment Boards, State Government authorities etc. to monitor and review this situation and the committee be apprised accordingly.

Reply of the Government

MoD has taken up the matter with the Chief Secretaries of all concerned State Governments vide letter No. 6(2)/2015-D(Q&C) dated 05.11.2019 to issue suitable instructions to institutionalize implementation of Centrally Sponsored Schemes in Cantonment areas. The Principal Directors, DE, the Commands are also pursuing it with concerned State Governments for inclusion of the Cantonment area/residents in its implementation programmes. Further, a workshop to prepare a roadmap of working with the State Government on the issue of extending these schemes to the states was scheduled for 17.04.2020 which could not be organized due to COVID-19, and this will be scheduled as soon as possible.

[For comments, please see Para No. 19 of Chapter I of the Report]

Ammunition Dumps

Recommendation No. 39

The Committee, during their deliberations in connection with examination of Demands for Grants 2019-20, expressed concern over the hazards posed by the ammunition dumps in vicinity or amidst the inhabited areas of the country. The Committee desire that the Ministry of Defence should instruct the Services to relocate such ammunition dumps away from populated areas before any untoward incident take place. Here, it is pertinent to mention that almost all the Cantonments are currently situated amongst thick city population and are not mere secluded areas, away from the city dwelling units. The Committee may be apprised of the policy or guideline being issued within one month of the presentation of this Report.

Reply of the Government

(a) The issue highlighted at Para 48 of the minutes pertains to the efforts being undertaken for construction of underground (UG) storage of ammunition at a few locations in Northern and Eastern Commands in collaboration with NHPS, a Government of India enterprise. These projects are planned at forward areas where civil population around the ammunition storage area is limited.

(b) The types of ammunition storage areas with respect to civilian population around, can be classified as following types:-

- (i) **Type A.** Forward Gun areas, Ammunition bunkers where no civilian population exists. The ammunition dumps are smaller in dimension and hold very limited quantity of ammunition. Main criteria for such works is to reduce vulnerability to enemy fire, ensure safe storage and safety of troops.

- (ii) **Type B.** Formation Ammunition Dumps and forward Ammunition Points located in near vicinity of Line of Control/International Boundary. The civil population around these ammunition dumps is very limited. Medium size storage location are required capable of reducing vulnerability due to enemy action as also to enhance safety of troops/civil population.
- (iii) **Type C.** Ammunition Depots located in rear areas. These have civil localities in proximity to its periphery. Emphasis is required on large ammunition storage with a focus on reduction of Outside Quantity Distance (OQD) while enhancing safety of ammunition.

(c) The current project undertaken by Directorate General of Operation Logistic (DG OL) through NHPC are for Type A and B Ammunition Dumps. While the current initiative by Directorate General of Operation Logistics (DG OL) would be helpful for Type A and B Ammunition Storage Dumps, due consideration also needs to be given for ammunition being stored in type C locations. These are the areas where more than 80% of ammunition is stored. In view of the same, following is under consideration:-

- i. Construction of Semi UG/UG Storage accommodations in Type 'C' to reduce Outside Quantity Distance (OQD).
- ii. Storage of UN Hazard Division 1.2 type of ammunition in Igloos (meant for 1.1 UN hazard), specially in the periphery of Depots to mitigate higher OQD requirements.

[For comments, please see Para No. 22 of Chapter I of the Report]

Recommendation No. 75

The intake of girl students has already been commenced in the Sainik Schools, yet the committee feel that more needs to be done in this regard so that the girl students are benefitted eventually. In this context, it is pertinent to mention here that it is the need of the hour that intake of girl cadets should be opened in the NDA. Once the new battalion is raised in NDA, as brought out in the foregoing paragraph, the girl cadets will also get an opportunity to serve the Forces through this important entry level. The committee, therefore, recommended that the proposal of entry of girl in NDA should be considered at top priority considering their admission has been initiated in the Sainik School and no stone should be left unturned in pursuance of this recommendation. The committee would like to be apprised of the developments made in this regard.

Reply by the Government

Entry of women into NDA is a policy matter yet to be decided by Government of India. However, OTA Chennai (Army), INA, Ezhimala (Navy) and AFA Dundigul (Air Force) are open for entry of women post completion of graduation. Also, AFMS, Pune is open for women into Medical Branch of all three services after class XII. Further, women have also been inducted into Corps of Military Police and the first batch of women recruits are undergoing training at CMP Centre, Bengaluru.

[For comments, please see Para No. 25 of Chapter I of the Report]

Chapter III

OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE REPLIES RECEIVED FROM THE GOVERNMENT

-NIL-

CHAPTER IV

OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE WHICH REQUIRE REITERATION AND COMMENTED UPON:

Growth of Defence Budget vis-à-vis Central Government Expenditure and Gross Domestic Product (GDP)

Recommendation Nos. 6-8

The Committee can apparently see that the allocation of Defence Budget, including Civil estimates and Pension for 2019-20 is Rs. 4,31,010.79 Crore, which accounts for 15.47 percent of total Central Government Expenditure and 2.04 percent of GDP for the year 2019-20. Further, Capital budget of Ministry of Defence for 2019-20 is 32 percent of the Capex of Central Government Expenditure. A close scrutiny of the data provided by the Ministry reveals that during 2018-19 (BE), Defence Expenditure, as a percentage of Central Government Expenditure was 16.56 percent. This has declined to a level of 15.47 percent in 2019-20 (BE). Defence Expenditure, as a percentage of GDP, which was to the extent of 2.72 percent in the year 2015-16 has also been steadily declining to the level of 2.04 percent in 2019-20 (BE).

A comparison of data provided by the Ministry, based on the Stockholm International Peace Research Institute (SIPRI) Military Expenditure Database indicates that in 2018, 5.5 percent of the Chinese Government Expenditure has been on Defence. During the same year, Defence expenditure, as a percentage of the Government expenditure has been to the extent of 18.5 percent in case of Pakistan, 9.0 percent for USA, 11.4 percent for Russia and 4.6 percent for UK. Also, during 2018, Defence Expenditure as a percentage of GDP was 1.9 percent in case of China, 4.0 percent in case of Pakistan, 3.2 percent in the case of USA, 3.9 percent for Russia and 1.8 percent in the case of UK. In the 40th Report of Standing Committee on Defence (16th Lok Sabha), the Committee had recommended for having a benchmark percentage of GDP earmarked for deciding on the allocation to the Defence Sector. However, the Ministry of Defence is of the opinion that it may not be always appropriate to link Defence spending in terms of national economic output. The reason adduced by the Ministry is that if the economy grows at a faster rate, spending decreases as a percentage of GDP but it doesn't mean that the level of spending has fallen or has even become inadequate. Looking at the spending as a percentage of GDP thus creates an illusion of declined spending by ignoring the size of economy. It has been further submitted that this question was also examined in detail by the Kargil Review Committee which did not recommend a specific, targeted percentage of GDP to be earmarked for Defence. It exhorted the need to extract the maximum value from each defence rupee, inter-alia, through rigorous prioritisation, restructuring of the defence forces, integration with defence production and focusing resources in areas likely to enhance the effectiveness of the defence forces.

The intention of the Committee in recommending for having a benchmark percentage of GDP earmarked for deciding on the allocation to the Defence Sector is to ensure that the plans for modernisation and upgradation of our forces do not suffer from lack of budget. The Committee fail to understand that with Defence Expenditure being 15.47 percent in 2019-20(BE) as a percentage of Central Government Expenditure, compared to 16.56 percent to that in 2018-19 (BE), how the Ministry is going to cater to the requirements of capital acquisition and burgeoning salary and

pension bills. Therefore, the Committee recommend that the Ministry of Defence should vigorously pursue its case for adequate allocation at RE stage and also a fixed percentage of GDP from the next budget.

Reply of the Government

In RE 2019-20, Rs. 4,48,820.10 crore has been allocated under Defence Budget (including Miscellaneous and Pensions) by M/o Finance which is an increase of Rs. 17,809.31 crore over BE 2019-20. The total Defence Budget is 16.63% of total Central Government Expenditure and 2.20% of GDP (RE 2019-20). Also, Capital Budget of Ministry of Defence in RE 2019-20 is approximately 33.07% of the total Central Government Capital Expenditure.

Data on growth of Defence Budget in comparison to central government expenditure and GDP, in absolute and relative terms, for the last four years and current financial year is given below:

(Rs. in crore)

Year	Defence Expenditure	Total CGE (Actuals)	Def. Exp % of CGE	GDP	Def. Exp % of GDP
2015-16 (Actual)	2,93,919	17,90,783	16.41	1,37,71,874	2.13
2016-17 (Actual)	3,51,650	19,75,194	17.80	153,62,386 (2nd RE)	2.29
2017-18 (Actual)	3,79,702	21,41,973	17.73	170,95,005 (1st RE)	2.22
2018-19 (Actual)	4,03,457	23,15,113	17.43	1,90,10,164 (PE)	2.12
2019-20(RE)	4,48,820	26,98,552	16.63	2,04,42,233(RE)	2.20

Note: GDP figures from FY 2015-16 to 2018-19 are as per Economic Survey 2019-20 (Vol-2) – Table 1.6- Components of GDP at Current Prices

GDP figure for 2019-20 (RE) is as per Budget at a Glance (2020-21)

BE= Budget Estimates, RE=Revised Estimates, PE = Provisional Estimates

It may be seen from the above table that although the Defence Budget as a percentage of GDP and central government expenditure is indicating fluctuating trends, however, it may be appreciated that it has been consistently increasing in absolute terms.

The matter of keeping certain percentage of GDP for Defence budget was taken up with Ministry of Finance in 2017. In their reply Ministry of Finance had, inter-alia, stated that allocations to Ministries/Departments are made largely on the basis of resource position of the government. Since Government resources come with definite cost, resource allocation is made among various competing priorities. Thus, Defence expenditure as definite percentage of total Government Expenditure/GDP cannot be ensured considering the fact the resource allocation are made on need basis.

[For comments, please see Para No. 7 of Chapter I of the Report]

CHAPTER V

**OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH GOVERNMENT HAVE
FURNISHED INTERIM REPLIES/REPLIES AWAITED**

-NIL-

**New Delhi;
9 February, 2021
20 Magha, 1942 (Saka)**

**JUAL ORAM
Chairperson
Standing Committee on Defence**

STANDING COMMITTEE ON DEFENCE (2020-21)
MINUTES OF THE THIRD SITTING OF THE STANDING COMMITTEE ON
DEFENCE (2020-21)

The Committee sat on Tuesday, the 9th February, 2021 from 1530 hrs. to 1600 hrs. in Committee Room No. 2, Block A, Extension to Parliament House Annexe (EPHA), New Delhi.

PRESENT

Shri Jual Oram - **Chairperson**

MEMBERS

Lok Sabha

2. Kunwar Danish Ali
3. Shri Ajay Bhatt
4. Shri Nitesh Ganga Deb
5. Shri Annasaheb Shankar Jolle
6. Choudhary Mehboob Ali Kaiser
7. Smt. (Dr.) Rajashree Mallick
8. Dr. T.R. Paarivendhar
9. Shri Kapil Moreshwar Patil
10. Shri Jugal Kishore Sharma
11. Shri Prathap Simha
12. Shri Brijendra Singh
13. Shri Durga Das Uikey

Rajya Sabha

14. Dr. Ashok Bajpai
15. Shri V. Lakshmikantha Rao
16. Shri Sanjay Raut
17. Shri Kamakhya Prasad Tasa
18. Dr. Sudhanshu Trivedi
19. Lt. Gen. Dr. D. P. Vats (Retd.)

SECRETARIAT

1. Smt. Kalpana Sharma - Additional Secretary
2. Dr. Sanjeev Sharma - Director
3. Shri Rahul Singh - Deputy Secretary

2. At the outset, the Chairperson welcomed the Members of the Committee and informed them about the agenda for the Sitting. The Committee then took up for consideration the following draft Action Taken Reports:-

- i. **Action Taken by the Government on the Observations/Recommendations contained in the Twenty-third Report (16th Lok Sabha) of the Standing Committee on Defence**

on the subject 'Proxy and Postal Voting by Defence Services Personnel in General Elections an Evaluation';

- ii. **Action Taken by the Government on the Observations/Recommendations contained in the Fiftieth Report (16th Lok Sabha) of the Standing Committee on Defence on the subject 'Provision of all weather road connectivity under Border Roads Organisation (BRO) and other agencies up to International Borders as well as the strategic areas including approach roads-an appraisal';**
- iii. **Action Taken by the Government on the Observations/ Recommendations contained in the First Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2019-20 on 'General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Canteen Stores Department, Welfare of Ex-Servicemen, Ex-Servicemen Contributory Health Scheme, Defence Pensions, Sainik Schools (Demand Nos. 18 and 21)';**
- iv. **Action Taken by the Government on the Observations/Recommendations contained in the Second Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2019-20 on 'Army, Navy, Air Force and Joint Staff (Demand Nos. 19 and 20)';**
- v. **Action Taken by the Government on the Observations/Recommendations contained in the Fourth Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2019-20 on 'Ordnance Factories, Defence Research and Development Organisation, Directorate General of Quality Assurance and National Cadet Corps (Demand No. 19 and 20)';**
- vi. **Action Taken by the Government on the Observations/Recommendations contained in the Fifth Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2020-21 on 'General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Canteen Stores Department, Welfare of Ex-Servicemen, Ex-Servicemen Contributory Health Scheme, Defence Pensions, Sainik Schools (Demand Nos. 18, 19, 20 and 21)';**
- vii. **Action Taken by the Government on the Observations/Recommendations contained in the Sixth Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2020-21 on 'Army, Navy, Air Force and Joint Staff (Demand Nos. 19 and 20)'; and**
- viii. **Action Taken by the Government on the Observations/Recommendations contained in the Eighth Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2020-21 on 'Ordnance Factories, Defence Research and Development Organisation, Directorate General of Quality Assurance and National Cadet Corps (Demand Nos. 19 and 20)'.**

3. After some deliberations, the Committee adopted the above reports without any modifications.

4. The Committee, then, authorized the Chairperson to finalise the above draft Reports and present the same to the House on a date convenient to him.

5. *****Does not pertain to the Reports*****

The Committee then adjourned.

APPENDIX II

ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/RECOMMENDATIONS CONTAINED IN THE FIRST REPORT (SEVENTEENTH LOK SABHA) ON DEMANDS FOR GRANTS OF THE MINISTRY OF DEFENCE FOR THE YEAR 2019-20 ON 'GENERAL DEFENCE BUDGET, BORDER ROADS ORGANISATION, INDIAN COAST GUARD, MILITARY ENGINEER SERVICES, DIRECTORATE GENERAL DEFENCE ESTATES, DEFENCE PUBLIC SECTOR UNDERTAKINGS, CANTEEN STORES DEPARTMENT, WELFARE OF EX-SERVICEMEN, EX-SERVICEMEN CONTRIBUTORY HEALTH SCHEME, DEFENCE PENSIONS AND SAINIK SCHOOLS (DEMAND NOS. 18 AND 21)'

1. Total number of recommendations **76**

2. Observations/Recommendations which have been accepted by the Government (please see Chapter II A):

Recommendation Nos. 1, 2, 3, 4, 5, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74 and 76

Total : 65
Percentage: 86%

3. Observations/Recommendations which have been accepted by the Government and commented upon (please see Chapter II B):

Recommendation Nos. 9, 10, 11, 13, 25, 36, 39 and 75

Total : 8
Percentage: 10%

4. Observations/Recommendations which the Committee do not desire to pursue in view of the replies received from the Government (please see Chapter III):

-Nil-

Total : 0
Percentage: 0%

5. Observations/Recommendations in respect of which replies of Government have not been accepted by the Committee, which require reiteration and commented upon (please see Chapter IV):

Recommendation Nos. 6, 7 and 8

Total : 3
Percentage: 4 %

6. Observations/Recommendations in respect of which Government have furnished interim replies/replies awaited (please see Chapter V):

-Nil-

Total : 0
Percentage: 0%