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STANDING COMMITTEE ON DEFENCE
(2021-22)

(SEVENTEENTH LOK SABHA)

MINISTRY OF DEFENCE

[Action Taken by the Government on the Observations/Recommendations contained in the Twenty-first Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2021-22 on ‘Capital Outlay on Defence Services, Procurement Policy, Defence Planning and Married Accommodation Project’ (Demand No. 20)]

TWENTY-FIFTH REPORT

LOK SABHA SECRETARIAT
NEW DELHI
December, 2021/ Agrahayana, 1943 (Saka)
TWENTY-FIFTH REPORT

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(2021-22)

(SEVENTEENTH LOK SABHA)

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Presented to Lok Sabha on 8.12.2021

Laid in Rajya Sabha on 8.12.2021

LOK SABHA SECRETARIAT
NEW DELHI
December, 2021/ Agrahayana, 1943 (Saka)
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COMPOSITION OF THE STANDING COMMITTEE ON DEFENCE (2021-22)

SHRI JUAL ORAM - CHAIRPERSON

Lok Sabha

2 Kunwar Danish Ali
3 Shri Nitesh Ganga Deb
4 Shri Rahul Gandhi
5 Shri D.V. Sadananda Gowda
6 Shri Anasahaeb Shankar Jolle
7 Choudhary Mehboob Ali Kaiser
8 Shri Rattan Lal Kataria
9 Dr. Ram Shankar Katheria
10 Shri Sridhar Kotagiri
11 Smt. Rajashree Mallick
12 Shri Uttam Kumar Reddy Nalamada
13 Dr. T. R. Paarivendhar
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 Durga Das (D.D.) Uikey
21 Vacant

Rajya Sabha

22 Dr. Ashok Bajpai
23 Shri N. R. Elango
24 Shri Prem Chand Gupta
25 Shri Venkataramana Rao Mopidevi
26 Shri Sharad Pawar
27 Shri V. Lakshmikantha Rao
28 Shri Kamakhya Prasad Tasa
29 Dr. Sudhanshu Trivedi
30 Lt. Gen. (Dr.) D.P. Vats (Retd.)
31 Shri K.C. Venugopal

SECRETARIAT

1. Dr. Sanjeev Sharma - Director
2. Shri Rahul Singh - Deputy Secretary
3. Smt. Shilpa Kant - Committee Officer
INTRODUCTION

I, the Chairperson of the Standing Committee on Defence (2021-22), having been authorized by the Committee, present this Twenty-fifth Report of the Committee on 'Action Taken by the Government on the Observations/Recommendations contained in the Twenty-first Report on ‘Capital Outlay on Defence Services, Procurement Policy, Defence Planning and Married Accommodation Project (Demand No. 20)’.


3. The Report was adopted at the Sitting held on 17.11.2021.

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 Twenty-first Report (17th Lok Sabha) of the Standing Committee on Defence is given in Appendix II.

New Delhi; JUAL ORAM
01 December, 2021
10 Agrahayana, 1943 (Saka)
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 Twenty-first Report (17th Lok Sabha) on ‘Demands for Grants for the year 2021-22 on Capital Outlay on Defence Services, Procurement Policy, Defence Planning and Married Accommodation Project (Demand No. 20)’ of the Ministry of Defence which was presented to Lok Sabha and laid in Rajya Sabha on 16.03.2021.

2. The Committee's Twenty-first Report contained 33 Observations/Recommendations on the following aspects:-

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3. Action Taken Replies have been received from the Government in respect of all the Observations/Recommendations contained in the Report. However, the replies on Recommendation Nos. 18 and 19 have been termed as “classified” by the Ministry and
have been forwarded to Hon'ble Chairperson in a sealed cover. These replies have been placed under ‘accepted’ category. Reply to the Recommendation No 5 has not been received from the Ministry as it is under approval. Therefore, reply no. 5 has been treated as an “interim reply” and is kept under Chapter V. The remaining 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, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30 and 31

(27 Recommendations)

(Please see Chapter II (A) of the Report)

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

Para Nos. 21, 32 and 33

(3 Recommendations)

(Please see Chapter II (B) of the Report)

(ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government’s replies:

Nil

(0 Recommendation)

(Please see Chapter III of the Report)

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

Para No. 10

(1 Recommendation)

(Please see Chapter IV of the Report)

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

Para Nos. 5 and 11
4. The Committee desire that the Ministry's response to their comments made in Chapter I of this Report and final replies to the Recommendations/Observations for which only interim replies have been given by the Government to be furnished to them at the earliest and in any case not later than six months of the presentation of this Report. It goes without saying that Action Taken Statements which are due to be submitted within six months of the presentation of this Report, see the light of the day within the prescribed timeline.

A. CREATION OF SEPARATE HEAD FOR COMMITTED LIABILITIES AND NEW SCHEMES

Recommendation No. 10

5. The Committee had recommended as under:

"The Committee learn that at present, there is no separate allocation of funds for Committed Liabilities and New Schemes under Defence Services Estimates and the funds for it are allocated under Capital Acquisition (Modernisation) Head. The Committee observe that the allocation in the 2021-22 for Army is Rs.30,636.90 crore against projection of Rs. 39,977.00 crore. For Navy (excluding Joint Staff) the allocation is Rs. 31,031.02 crore vis-à-vis projection of Rs. 65,888.96 crore which is less than the half of the projected amount. The allocation for Air Force stands at Rs. 49,320.77 crore against the projection of Rs. 72,180.06 crore. In addition it is ensured by the Ministry that urgent and critical capabilities are acquired without any compromise to the operational preparedness of the Defence Services. The Committee find it contradictory in comparison to amount of funds actually allocated under BE-2021-22 for the three services especially Navy being a capital intensive force. Ministry had sought additional funds of Rs. 61,198.12 crore at RE stage in 2021-22 under Modernization Head but only Rs. 24,272.50 crore were provided to them. Considering this grim situation towards allocation in Capital Acquisition Fund, the Committee in their 7th Report had recommended the Ministry of Defence to create a dedicated fund for Committed Liabilities and New Schemes. As no progress has been observed by the Committee in this regards, the Committee again urge the Ministry to create a separate dedicated Head for Committed Liabilities and New Schemes from the next Budget onwards, so that
there are no difficulties faced in matching the deadlines in the payment towards already committed purchases and latest weaponry could be procured under New Schemes."

6. The Ministry in its Action Taken Reply has stated as under:

“The outstanding contractual commitments which are overdue or commitments which are likely to arise during a period on account of completion in contractual milestone constitute committed liabilities over that period. This amount of committed liabilities is dynamic in nature and depends on contracts concluded at a particular point of time, contractual milestones due to be fulfilled over a defined period and the associated slippages, if any. New Schemes constitute new projects/proposals that are at various stages of procurement/approval and are likely to be fructified over a defined period (usually a financial year). The forecasted amount for new schemes also keeps on changing with reference to their fructification/finalization. On conclusion of contract with respect to a “new scheme” the same becomes a committed liabilities and payments have to be scheduled as per fulfilment of contractual milestones. Thus, the Capital Acquisition (modernization) segment of the Capital Budget comprises of both committed liabilities and new schemes.

It is submitted that in the Defence Services Estimates, the allocation under Capital Acquisition (modernization) is made through specific/separate Minor Heads which caters to both the Committed Liabilities and New Schemes.”

7. The Committee find from the reply of the Ministry that the Capital Acquisition (modernization) segment of the Capital Budget comprises both ‘Committed Liabilities’ and ‘New Schemes’ through ‘minor heads’ under Capital Acquisition (modernization). As the additional funds provided to the Ministry under Modernisation Head at RE stage in 2021-22 stood at Rs. 24,272.50 crore against the projection of Rs. 61,198.12 crore, which in the opinion of the Committee is very abridged amount even given to conservative estimates. This has a rippling effect once divided further into sub-heads. The amount provided evidently stands even less than fifty percent of the projection. The Committee, therefore, in no uncertain words opine that it would be in the best interest and in
fitness of things for the Ministry to create two separate Heads namely Committed Liabilities and New Schemes. The Committee would like to be apprised of the action taken by the Ministry in this regard.

B. OFFSET CLAUSE

Recommendation No. 21

8. The Committee had recommended as under:

The Committee have been apprised that as on date, a total of 56 Defence offset contracts have been signed in MoD. The total offset obligations are estimated at approx US$ 13.03 billion to be discharged over a period from 2008-2027. Out of the total contracted obligations US$ 3.57 billion has been discharged by the vendors, of which US $ 1.93 billion has been accepted in audit and the balance claims are under clarification/examination. The Committee are of the view that the Ministry of Defence would take appropriate measures for clearing balance claims which are under clarification/examination which would result in further strengthening of Defence Industrial Base.

9. The Ministry in its Action Taken Reply has stated as under:

“As per the updated status, till April, 2021, a total of 56 Defence offset contracts have been signed in MoD. The total offset obligations are estimated at approximately US $ 13.03 billion to be discharged over a period from 2008-2027. Out of the total contracted obligations, US $3.67 billion has been discharged by the vendors, of which US $2.16 billion has been accepted in audit and the balance claims are under clarification/examination. With the introduction of end-to-end online submission and verification of offset claims through the offset portal, the process of audit and disposal of offset claims has become more transparent, efficient and accountable.”

10. The Committee note that till April, 2021, a total of 56 Defence offset contracts have been signed in MoD which have offset obligations estimated at approximately US$ 13.03 billion, to be discharged between the years 2008-2027. The Committee observe with restrain that a considerable period of time has been elapsed and to be precise thirteen years have passed and the Ministry has been able to dispense only US$ 3.67 billion out of the total contracted obligations. The Committee, therefore, has no option at this stage but to reiterate their earlier
recommendation and desire that the Ministry of Defence should take precise measures to expedite the procedure for clearing balance claims at the earliest. The Committee would also like to be apprised about the updated position of settlement of balance claims at the time of furnishing Action Taken Statements.

C. MARRIED ACCOMODATION PROJECT (MAP)

Recommendation No. 32

11. The Committee had recommended as under:

“The Committee feel that budget constraints are always there in capital intensive projects like MAP, and the Committee appreciate the decision of the Ministry to complete the targeted number of dwelling units through AMWP. At this stage the Committee only desire the Ministry to get this proposal accepted at the earliest and start with the construction of Dwelling Units as soon as possible so that it does not get delayed further.”

12. The Ministry in its Action Taken Reply has stated as under:

“Against total requirement of 1,98,881 Dwelling Units 1,17,118 Dwelling Units have already been completed under Phase-I and Phase-II. As of now 10,661 of Phase-II are in various stages of planning and execution. The Phase-II is likely to be completed by Dec 2023. Rs 100 crore were allotted for preparation of DPRs for 24,592 Dwelling Units of Phase-III which are at advance stage of completion. Now, as per decision taken in the DMA, the Draft CCS Note for foreclosure of MAP Phase III and to execute the remaining works through the AMWP route is under preparation.”

13. The Committee find that out of 1,98,881 Dwelling Units only 1,17,118 Dwelling Units have been completed and 81,763 of their numbers are yet to be completed under Phase-I and Phase-II. The Committee also take serious note of the delay in commencement and execution of the three phases of MAP as not even one of them is complete thus far even after a considerable lapse of time. The
Committee take note of the fact that the draft CCS Note for foreclosure of MAP Phase III and for executing the remaining works through the Annual Major Works Programme (AMWP) route is under preparation. In this regard, the Committee desire that the Ministry formalizes a concrete plan bringing forth the pragmatic time lines, and making concerted efforts to expedite the matter and complete the construction of the remaining number of dwelling units in all the three phases of MAP. The Committee would like to be apprised of the progress and latest status in this regard at the time of furnishing Action Taken Statements.

D. PLAN TO EXTEND MAP IN JAMMU AND KASHMIR

Recommendation No. 33

14. The Committee had recommended as under:

“During the course of evidence, when the deliberations on the proposal or plan to increase MAP in Jammu and Kashmir was taking place, it was informed that as peace is returning to the Kashmir Valley, there will be a requirement of putting more accommodation in the valley. The Committee, welcome the idea of increasing the number of dwelling units in Kashmir Valley and accordingly recommend that emphasis should be given on completing required number of Dwelling Units (DUs) at the earliest so that our Armed Forces would be in a better state of mind to serve the nation.”

15. The Ministry in its Action Taken Reply has stated as under:

“The construction of Dwelling Units in Jammu & Kashmir as per the approved re-distribution and re-location plan was considered to be undertaken in MAP Phase-III, which would now be executed through the AMWP route, once the CCS approval is received for foreclosure of MAP Ph-III. The additional requirement of Dwelling Units at Jammu and Kashmir will also be taken into consideration while finalising the AMWP. ”

16. The Committee observe that as peace has returned to the Kashmir valley, there would be an obvious increase in demand for more dwelling units in Jammu and Kashmir. Considering additional requirement of Dwelling Units under MAP
in Jammu and Kashmir by the Ministry of Defence is commendable, nevertheless the Committee desire that concrete steps should be taken to finalise the matter at the earliest so that our Armed Forces do not have to fret about the housing whether they're living on or off base and consequently serve the country in the most efficient manner. The Committee also desire that details of dwelling units to be constructed through Annual Major Works Programme Route should be intimated to the Committee at the time of furnishing of Action Taken Statements.
CHAPTER II (A)

OBSERVATIONS/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Capital Outlay on Defence Services

Recommendation No. 1-3:

Recommendation No. 1

The Committee note from the information submitted by the Ministry that Capital Outlay provides allocation for Land & Construction Works of the three Services and other departments. In other words, it caters for the expenditure incurred on durable assets of Defence Services, i.e., Army, Navy, Air Force, Joint Staff, Defence Ordnance Factories, Defence Research and Development Organisation (DRDO), Director General Quality Assurance(DGQA), National Cadet Corps (NCC), Married Accommodation Project, National Defence Academy, Rashtryia Rifles etc.

Recommendation No. 2

The Committee further note that during the year 2020-21, the Ministry allocated Rs.3,47,088.28 crore under Defence Services Estimates vis-à-vis the projection of Rs.4,76,247.97 crore which is 7.44% increase over BE 2020-21. In Capital Budget the Ministry was allocated Rs. 1,35,060.72 crore as BE of 2021-22. Out of this head for the Capital Acquisition (including DGOF supplies) Ministry has been allocated Rs. 1,11,463.21 crore; for Land and Works of three services (including Married Accommodation Projects) Rs. 11,537.01 crore and for DRDO, DGOF and other Defence Departments Rs. 12,060.50 crore.

Recommendation No. 3

The Committee are glad to note that there is an increase in the allocation of the budget in the Capital Head vis-à-vis budgetary allocations in 2019-20 and 2020-21. The Committee note that there is an allocation of Rs. 3,62,345 crore for Ministry of Defence for Defence Services and other organizations excluding Defence Pensions in 2021-22 which is Rs. 24,792.62 crore or 18.78% more as compared to 2020-21. The Committee commend the Ministry for their persistent pursuance of Ministry of Finance at various levels for approval of this enhanced budgetary allocation and expect that the Ministry of Defence would utilize this budget for developing and acquiring the most modern state of the art fighting platforms, which can match Northern and Western
neighbors in the light of current security threats on the Northern frontiers of the country. The Committee further note that the Ministry could utilize only Rs. 2,33,173.70 crores (upto Dec. 2020) out of RE of Rs. 3,43,822.00 crore in 2020-21 at the time of furnishing action taken replies to the Committee. The Committee further hope that the Ministry utilizes the entire allocated budget under Capital Outlay in 2020-21 and the projected allocation in 2021-22 to enhance this acquisition of latest weaponry, air craft, ships, tanks and capital intensive projects including land, building and other infrastructure.

Reply of the Government

In FY 2020-21, an amount of Rs. 1,13,734 Crore was allocated in Budget Estimates (BE) and Rs. 1,34,510 Crore in Revised Estimates (RE) under Capital Head. Against these allocations, expenditure of Rs. 1,34,407.50 Crore (i.e. 99.92% of RE 2020-21) has been done till March (Final-as on 19.05.2021), 2021. It may be appreciated that Ministry has utilized the entire budget allocated under Capital head.

It may also be added that necessary instructions are issued from time to time for compliance with financial propriety norms and avoidance of overspending/underutilization of funds. The Committee may be assured that all efforts will be made to ensure optimum utilization of available resources. If required, additional funds will be sought at appropriate stages.

Projections and Allocations in respect of three services

Recommendation No. 4

The Committee observe that since 2015-16, none of the three Services have been allocated the same amount that has been projected by the Ministry at BE or RE State. The gap between the RE figures for Army in 2015-16 was at the time of Rs. 3614.86 core which has increased to Rs. 5735.89 crore in 2020-21. For Navy the difference was Rs. 5412.14 crore in 2015-16 at RE stage which has become Rs. 14,226.4 crore in 2020-21. For Air Force the gap was Rs. 5338.63 crore in 2015-16 which increased to Rs. 17,871.27 crore in 2020-21 at RE stage. The Committee further note that at BE stage in 2021-22 the gap between the projected and allocated budget for Army, Navy and Air Force in Rs. 14,960.2 crore, Rs. 37,667.23 crore and Rs. 23,925.79 crore which are remarkably high. The Committee are of the view that in the present scenario of conflict with our neighbouring countries especially at borders of our country, such situation is not conducive for preparation of the country to bring it at par
with them or making it even better than theirs by possessing capital intensive modern machines which are imperative to tilt the result of war in our favour and also increase deterrence capabilities of our country. Taking into account the trend of sharp decline in the allocation of funds vis-à-vis projections under Army, Air Force and Navy, the Committee recommend that the Ministry should not make any reductions while allocating budget for Capital Head for any of the Services in the Demands for the coming years. The Committee also recommend the Ministry to take steps to acquire funds at the stage of Revised Estimate Stage and at the time of Supplementary Grants keeping in view the operational preparedness of the three forces equally.

Reply of the Government

Based on ceilings received, funds are allocated to the Services/organizations taking into consideration pace of expenditure, committed liabilities, approval stage of various projects/schemes, absorption capacity etc. Though the allocations received are not as per projections made, additional funds are being sought at Supplementary/RE stage taking into account expenditure pattern during the year, pending committed liabilities etc. Also, if required, through reprioritization, it is ensured that urgent and critical capabilities are acquired without any compromise to operational preparedness of the Defence Services.

Ratio for Capital and Revenue Outlay

Recommendation No. 6

The Committee observe that the ratio for Capital and Revenue outlay this year can find some solace as it has improved from the ratio of 83:17 in 2015-16 to 80:20 in 2021-22. However, the ratio is way short of the ideal ratio of 60:40 (Revenue : Capital) in case of Army. With respect to other services the ratio between the Revenue and Capital seems to be near the ideal ratio of 60:40. Although the Ministry has almost achieved the target of ideal ratio for total outlay in 2020-21 and 2021-22, still the Committee, recommend that measures should be taken to bridge the gap and achieve ideal ratio of 60:40 (Revenue : Capital) in respect of Army and other Services.

Reply of the Government

The higher growth in the revenue expenditure of the Services is mainly attributable to the fact that Army is manpower intensive with a large portion of its expenditure devoted to Salaries. This skews the revenue-capital ratio in favour of revenue
expenditure in overall sense and for Army in particular. Maintaining ideal revenue/capital ratio for Army will broadly depend on reduction of manpower, which can prove detrimental to security of the nation. However, efforts are made to improve the revenue/capital ratio from ongoing pattern by minimizing revenue expenditure.

Overall, Revenue to Capital Ratio for Defence Services was 65:35 in BE 2020-21 and 61:39 in BE 2021-22. Navy and Air Force are Capital Intensive in nature and the same is being reflected in the distribution of funds in the Revenue and Capital Segment of the respective Services. For Navy, Revenue to Capital Ratio was 46:54 in BE 2020-21 and 41:59 in BE 2021-22 and for Air Force this ratio was 41:59 in BE 2020-21 and 37:63 in BE 2021-22.

It may also be added that ceilings are received separately for Revenue (Salary and Non-Salary) and Capital, based on which funds are allocated to services. The procedure followed for allocation involves trend of expenditure, projections made by the services, Committed Liabilities to be fulfilled, absorption capacity etc. Therefore, it may not be possible to maintain a particular ratio in favour of Capital or Revenue. However, every effort is made to ensure that no project/proposal is shelved for want of funds. As and when required, additional funds are sought and requirements reprioritized ensuring optimum utilization of available resources.

Modernization of Defence Forces

Recommendation No. 7

The Committee note that the Modernization of Defence Forces involves the acquisition of new state-of-the-art platforms, technologies and weapon systems to upgrade and augment Defence capabilities and it is a continuous process based on threat perception, operational necessities and technological changes to keep the Armed Forces in a state of readiness to meet the entire spectrum of security challenges. As per the assertion of the Ministry, the Government attaches the highest priority to ensure that the Armed Forces are sufficiently equipped to meet any operational requirement. This is achieved through induction of new equipment and technological upgradation of capabilities. The equipment requirements of the Armed Forces are planned and progressed through a detailed process which includes 15 Year Long Term Integrated Perspective Plan (LTIPP), a five year Service-wise Capability Acquisition Plan, a two year roll-on Annual Acquisition Plan and deliberations by the Defence Acquisition Council chaired by the Raksha Mantri.

Reply of the Government

Statement of facts, therefore, no action is required.
Modernization of Defence Forces

Recommendation No. 8

The Committee further note that an overview of the BE, RE and AE on Modernization for capital acquisition since 2016-17 shows that Actual Expenditure is more than the allocated funds even after RE Stage. Although the Ministry has utilized Rs. 70,570.81 crore out of BE of Rs. 90047.80 crore in 2020-21 by December, 2020, the Committee hope that the target of full utilization of funds is achieved under this head by the end of F.Y. 2020-21. The Committee are given to understand that modernization of Armed Forces through procurement of new equipment and upgrading of existing equipments and systems is a continuous process which are progressed as per the approved Capital Acquisition plans, therefore, the Committee recommend that enhanced and adequate budgetary allocation should be made under Capital Head for modernization purpose so that the procurement and upgrading procedures should be carried out without any hurdle of shortage of funds.

Reply of the Government

In BE 21-22, an allocation of Rs. 1,11,463.21 Crore (i.e. an increase of Rs.21,415.41 Crore over BE 20-21) has been made under Modernisation (Capital Acquisition) Head. Funds are allocated to the Services taking into consideration pace of expenditure, committed liabilities, approval stage of various projects/schemes etc. Though the allocations received are less than projections made, however, based on expenditure pattern during the year, additional funds are sought at Supplementary/RE stages. Also, if required, through reprioritization, it is ensured that procurement and upgrading procedures are carried out without any hurdle of shortage of funds.

Committed Liabilities and New Schemes

Recommendation No. 9

9. The Committee find that Committed Liability refers to payments anticipated during a financial year in respect of contracts concluded in previous years. Under the Defence Services Estimates, Committed Liabilities constitute a significant element in respect of the capital acquisition segment, since one project may span several financial years. As such, it is important to track the element of Committed Liabilities which holds first charge on the budget allocation. Inadequate allocation for committed liabilities would definitely lead to ‘default situation’ on contractual obligations. New Schemes
include new projects/proposals which are at various stages of approval and are likely to be implemented in near future.

**Reply of the Government**

Reply of the Government is combined for Recommendation No. 9 and 10.

**PROCUREMENT POLICY**

**Defence Procurement Policy**

**Recommendation No. 12**

The Committee find that the policy for procurement of Defence equipment for the Armed Forces aims to ensure timely procurement of military equipment, systems and platforms as required by the Armed Forces in terms of performance capabilities and quality standards, through optimum utilisation of allocated budgetary resources. The policy also seeks to ensure that the highest degree of probity, public accountability, transparency, fair competition and level-playing field are achieved in the process of procurement. In addition, self-reliance in Defence equipment production and acquisition is steadfastly pursued as a key aim of the policy. The policy is implemented through the mechanism of Defence Procurement Procedure (DPP). The Committee also find that the Defence Procurement Procedure 2016 has been revised as Defence Acquisition Procedure 2020 which is driven by the tenets of Defence Reforms announced as part of Aatmanirbhar Bharat Abhiyan. In order to promote indigenous design and development of defence equipment ‘Buy {Indian-IDDM (Indigenously Designed, Developed and Manufactured)}’ category which was introduced in 2016 and was accorded top most priority for procurement of capital equipment, has been retained in DAP 2020. The Committee were also informed that Ministry of Defence has notified a ‘Negative list’ of 101 items for which there would be an interim embargo on the import beyond the timeline indicated against them.

**Reply of the Government**

These are observations of the Committee based on the information provided by MoD. Therefore, no further action is envisioned.

**Recommendation No. 13**

The Committee are hopeful that new Defence Acquisition Procedure will make the procedure fast track and the Services will get the supply of arms, equipment and ammunition in time and promote self reliance at the same time. The Committee note the noble intentions of the Ministry in the form of DAP 2020, nevertheless they recommend that concerted efforts of all stakeholders i.e. the Ministry, DPSUs, OFB, the Armed
Forces and private sector are indispensable for realisation of the goal of Self Reliance in Defence Sector for which all efforts should be done by the Ministry so as to maximize the gains from each of the above.

**Reply of the Government**

To ensure self-reliance in procurement of defence equipment and achieve self-reliance in Defence production following measures have been introduced in Defence Acquisition Procedure (DAP) – 2020:-

(i) **Notification of a list of weapon/platforms for ban on import** – This would encourage production of these weapons/platforms in India.

(ii) **Indigenisation of import spares** – Explore willingness of Foreign vendors to progressively undertake manufacture of amongst other things, spares in India.

(iii) **New category of Buy (Global – Manufacture in India)** – The new category enables ab-initio indigenisation of spares.

(iv) **Co-production through Inter Government Agreement**. The newly added provision enables establishing co-production facilities through IGA and also explores import substitution.

(v) **Make Category. Make II & Make III** (newly introduced in DAP 2020) categories further the objective of self-reliance by involving greater participation of Indian industrial eco-system including private sector.

(vi) **FDI in Defence Manufacturing**. Introduction of New category Buy (Global – Manufacture in India) encourage Foreign OEMs to set up ‘Manufacturing / Maintenance entities’ through its subsidiary in India. The definition of Indian Vendor has also been aligned to the new FDI policy.

(vii) **Offset Guidelines**. The revised Offset Guidelines are focused towards development of Defence ecosystem while giving incentives to ToT and Defence Manufacturing, at the same time encouraging MSMEs & Defence Industrial Corridors.
Accountability and Transparency in Defence Procurement

Recommendation No. 14

From the information submitted by the Ministry, for ensuring accountability and transparency in Defence Procurement cases, the Committee note that measures for promoting Probity, Public Accountability and Transparency in Defence capital procurements, include execution of Pre Contract Integrity Pact (PCIP) for all cases above Rs. 20 crore to ensure corruption free procurement process (binding agreement between parties that their officials will not offer or accept bribes), guidelines for handling of complaints provide for time bound disposal of complaints which are aligned to CVC/DOP&T guidelines, instructions issued for ascertaining vigilance status of L1 vendor before seeking approval of the Competent Financial Authority (CFA) and guidelines for penalties in business dealings with entities and capacity assessment for shipbuilding entities notified. As accountability and transparency is extremely imperative in the Defence Procurement Procedures, the Committee recommend that the above measures be strictly followed and firm monitoring mechanism be put in place for early procurement of weapon systems.

Reply of the Government

Ministry of Defence is committed to maintaining the highest standards of probity, transparency and accountability in the defence procurement process and to follow the laid down procedure and policies thereof.

Increasing Dependence on Foreign Suppliers for Military Hardware

Recommendation No. 15 & 16

15. The ever increasing import of arms and equipments has been a cause of worry for the Committee. On being largest importer of the arms and equipment in the World, the Ministry apprised the Committee that no authoritative and official information of India being the largest importer of Defence equipment is available as no country officially reveals information on import of Defence equipment. However, in the report published in February 2017 by the Stockholm International Peace Research Institute (SIPRI), India has been shown as the largest importer of Defence equipment for the year 2012-16. The Committee learnt that capital procurement of Defence equipment is undertaken from various domestic as well as foreign vendors, as per extant Defence Procurement Procedure (DPP), based on threat perception, operational challenges and technological changes so as to keep the Armed Forces in a state of readiness to meet the entire spectrum of security challenges.
16. The Committee note that during the last four financial years (2016-17 to 2019-20), Out of total 213 contracts, 90 contracts worth about Rs.1,76,569.10 crore have been signed with foreign vendors including USA, Russia, Israel, France, etc. for procurement of Defence equipment for Armed forces. The Defence equipment imported during this period includes helicopters, aircrafts, missiles, rifles, artillery guns, simulators and ammunition.

Reply of the Government

Statement of facts, therefore, no action is required.

Recommendation No. 17

The Committee also note that during the year 2020-21 (upto 21.01.2021), total expenditure on foreign contracts under capital Acquisition budget for the Defence Forces was 24384.63 crore which is a crucial percentage of the BE for the Financial year 2020-21. The Committee appreciate the efforts of the Ministry to bring down the expenditure on imports, as the expenditure has come down from Rs 31058.34 crore in 2019-20. The Committee recommend that ways and means should be forced so that Ordnance Factories, DPSUs, DRDO and Private Industries work in coordination to produce not only import substitute products but also expand their export potential so that the country become an exporter of defence equipment.

Reply of the Government

Ministry of Defence, Department of Defence Production has taken several initiatives to reduce the import of Defence items. Some of the initiatives are enumerated as under:

- **Indigenization Policy:** Policy for Indigenization was notified 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 through indigenization of products and processes.

- **Indigenization Portal (SRIJAN portal):** SRIJAN portal (srijandefence.gov.in) to promote indigenization was launched on 14 Aug 2020. As on date i.e, 24.06.2021, 10714 items, which were earlier imported by DPSUs//OFB/SHQs, have been displayed on the portal. The Indian industry has shown interest for 2799 displayed items so far. DPSUs/OFB/SHQs are interacting with these industries for indigenization of the items as per extant procedures.
- **Implementation of Make-II** – The Make-II framework (Industry funded prototype development) for implementation by DPSUs/OFB was notified on 11.02.2019. DPSUs/OFB have identified 1728 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 Raksha Mantri on 04 Nov 2019. Under this Framework, the procuring organization may aggregate demand of the item for a long period of up to 10 years, in cases where it finds challenges in indigenization.

- **Positive lists of Indigenisation**: Ministry of Defence has notified two positive list of items, for which there would be an embargo on the import beyond the timeline indicated against them. This is a big step towards self-reliance in defence. This offers a great opportunity to the Indian defence industry to manufacture these items using their own design and development capabilities to meet the requirements of the Armed Forces. The fn issued in May 2021. This list includes some high technology weapon systems like artillery guns, assault rifles, corvettes, sonar systems, transport aircrafts, light combat helicopters (LCHs), radars, Helicopter with all up weight, next generation corvette, Border Surveillance system, Land Based MRSAM weapon system, Rocket RGB-60 HE with fuse, Armoured Dozor, Anti-material Rifle, Counter Mine Flail, Instant fire Detection and suppression system for tanks and many other items to fulfill the needs of our Defence Services.

- Enhanced domestic procurement for FY 2021-22 i.e. 64.09% of the total procurement i.e. Rs. 71438.36 Crore.

**In addition to the above, DPSUs have also taken initiatives to promote indigenisation. The details of such initiatives are as below:**

**HAL**: HAL has adopted multifarious approach for reducing dependence on import of Defence equipment, which includes indigenous design and development, in-country manufacture under license from OEMs, mid-life upgrade of existing platforms, MRO of available platforms and indigenization of imported systems and LRUs wherever feasible have been taken up by HAL ever since inception.

HAL’s product profile includes Su-30 MKI, LCA Tejas, Dornier Do-228, Hawk, Basic Trainer Aircraft HTT-40, ALH Dhruv, Light Combat Helicopter (LCH) and Light Utility Helicopter (LUH). These aircraft/helicopters are required by the Indian Armed Forces for modernisation and strengthening of their fleet.
Further, in order to reduce the import bill through indigenization of products and processes, there is a need to ensure timely placement of orders and induction of indigenous platforms manufactured and developed by HAL, under "Make in India".

HAL has been regularly allocating 6-8% of its annual turnover towards R&D expenditure. The main platform under in house designed and development are HTT40, Basic Trainer Aircraft, HTFE-25 and HTSE-1200 engines, Hawk-I and Indian Multirole Helicopter.

Indigenisation is an ongoing activity at the HAL for providing support to manufacturing as well as Maintenance, Repair and Overhaul (MRO) services for all projects throughout their service life. To ensure use of Make in India components, equipment and services for fostering self-reliance and to manage obsolescence for sustenance of fleets, HAL continuously undertakes indigenisation of various items of foreign origin fitted on HAL platforms to reduce dependence on imports. Every year HAL indigenizes sizeable number of imported items with considerable Foreign Exchange (FE) savings through its extant procedure. During 2019-20, HAL has indigenized around 1500 items.

HAL has taken significant progress in the past couple of years in respect of Indigenisation/ Make in India in line with Government initiatives as given below to encourage private participation for promoting domestic manufacturing capabilities of defence equipment in the country. These initiatives will help in reduction in import content and encourage/ create local aerospace ecosystems in the country.

- **Indigenisation through Make-II’ Procedure**: A framework for implementation of 'Make-II’ Procedure at DPSUs/ OFB has been issued by MoD in Feb, 2019. In line with Make-II framework of MoD, HAL Make - II procedure was made and implemented at HAL in Dec 2019. HAL has also identified items to be indigenized through Make-II procedure and the same is hosted in HAL’s website. EOIs of these items are being issued in phased manner to take up for indigenisation under Make-II and till date HAL has issued EoIs for more than 600 items till date for indigenisation under Make-II.

- **Hosting of Govt. Test Facilities for utilization by Private Vendors**: HAL has hosted more than 85 types of test facilities available at HAL for utilization by Industries on payment basis. These facilities are being extensively utilised by both govt. organizations and Indian private companies. More than 500 no. of enquiries on utilization of test facilities received and completed. More than 55 vendors (Indian Private Vendors and Govt. Organisations) have utilized the test facilities till now.
Uploading of imported items in Srijan Defence Portal: MoD has developed and launched Srijan Defence Portal (an indigenization portal) to support Indian Industries with opportunities for Make In India in Defence. It acts as an interface or link between DPSUs and Indian private vendors for indigenization of imported components including alloys and special materials. HAL has uploaded more than 4800 nos. of imported items till date in the portal.

Participation in Defence Industrial Production Corridors: Government has announced to develop two defence industrial production corridors in Uttar Pradesh & Tamil Nadu to promote domestic production of defence equipment by public sector, private sector, and MSMEs [Micro, Small, and Medium-sized Enterprises]. HAL has planned capital investment of Rs 1200 Crs for the growth of UP Corridor and approx. Rs. 646.09 Crs has been spent till Jan, 2021.

Hosting of items in HAL Website: Apart from items identified under Make-II, HAL has hosted around 300 imported systems and sub systems of mechanical, electrical, avionics, instrumentation categories in HAL’s website under ‘Make in India’ to enable private industries to take up for indigenization through HAL’s extant indigenisation procedure. Contact details of division wise nodal officer for each item are also provided in the website www.hal-india.co.in under ‘Make in India’.

Implementation of Third Party Inspection (TPI): To further ‘Make in India’ efforts, Policy Document on utilization of Third Party Inspection (TPI), released in Dec 2018. Six TPI bodies have been approved and empanelled jointly with DGAQA, till date. Three divisions of HAL are already availing the services of TPI.

Special Focus on MSME: MSMEs have also been granted relaxation in the registration and profitability criteria for consideration as eligible “Indian Vendor” for participation in the ‘Make in India’ initiative by GoI. MSME associations are being involved for carrying out feasibility studies for indigenisation projects. HAL Make-II procedure has earmarked projects with estimated cost (Design & development phase and Procurement phase) not exceeding Rs 250 Lakhs, for MSMEs/Startups.

Implementation of Public Procurement (Preference to Make in India) Order: HAL has implemented the Public Procurement (Preference to Make in India), Order 2017 issued by DIPP vide letter dt.15th Jun 2017 and its subsequent amendments.

Organizing/participation in exhibitions/ seminars: HAL is organizing, participating and supporting various exhibitions/ seminars/ webinar organized with MOD’s initiatives to promote Indigenization and vendor development.
Support to Vendors: HAL also provides requisite technical support to private vendors during Indigenous development, prototype development and testing. HAL regularly organizes Vendor Meet for capacity building of domestic players. Majors structures for LCA like wing, front fuselage, rear fuselage and structures for Su-30 MKI like Vertical Fin, Stabilizer, Slat, cannard are realized through private vendors by extended all technical support.

BEL: Import bill reduction can be achieved through self-reliance in terms of manufacturing as well as design & development within the country. Following steps are being taken in BEL to enhance indigenisation. BEL has identified 360 items for indigenisation under Make-II.

Manufacturing: BEL is investing in Industry 4.0 technologies in areas of Manufacturing, Supply Chain and other broader digital transformation initiatives with specific, focused technology that span the entire organization. The upcoming manufacturing Plants of BEL i.e. ‘Defence Systems Integration Complex’ at Palasamudram, Advanced EO and IIR seeker manufacturing facility at Nimmeluru and Land based EW Systems at Ibrahimpatnam and future plants will leverage the specific technologies of Industry 4.0.

It is planned to incorporate Industry 4.0 Standards in the new Unit being established, in discussion with the Industrial Consultant being selected. This will include surveillance and remote monitoring of critical processes, automation & control of production (particularly inspection & testing) processes where feasible, automatic collection & compilation of process data, Data analysis for continual process improvements, etc. This is expected to be operational by the year 2022-23. BEL can quickly diversify into new technology segments through necessary partnerships and scale up manufacturing. e.g., BEL has manufactured and supplied 8153 nos. ventilators to several State Governments.

R&D: With an aim to reduce the need for foreign ToT based products (which involve heavy imports), BEL will continue to take the following steps towards design & development of products indigenously:

BDL: BDL has taken up 6% reduction in import of items during 2020-21 in MoU. BDL has identified 80 items for indigenisation under Make-II- Indigenization of products like Konkurs-M ATGM, Invar –ATGM, Milan -2T ATGM, LWT XP and Varunastra has been established by 96.3%, 87.9%, 71%, 91% and 86% respectively. Product wise Indigenization levels are as follows:
<table>
<thead>
<tr>
<th>Product</th>
<th>Achieved</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Konkurs-M</td>
<td>96.3%</td>
<td>Further Indigenization is not viable/economical.</td>
</tr>
<tr>
<td>Invar</td>
<td>87.9%</td>
<td>Indigenization up to 95% is under progress &amp; will be completed by 2022. Further 5% of Indigenization is not viable/economical.</td>
</tr>
<tr>
<td>Milan 2T</td>
<td>71%</td>
<td>As per the contract 71% of Indigenization is completed Remaining 29% is supplied by OEM as a kit. (Being all time import)</td>
</tr>
<tr>
<td>LWT-XP</td>
<td>91%</td>
<td>91% is already indigenized and further 8% import content is from tier II vendor and 1% is direct import by BDL.</td>
</tr>
<tr>
<td>Varunastra</td>
<td>86%</td>
<td>86% is already indigenized and further 14% import content is from tier II vendor. BDL is not importing any item from overseas supplier.</td>
</tr>
</tbody>
</table>

**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 65% in Metro cars. The overall import content depends on product mix manufactured each year.

To further enhance indigenization, BEML invited ‘Expression of Interest’ for manufacturing and technology partnerships with reputed global OEMs looking to establish and / or expand their supply chains / manufacturing base in India for the manufacture of various goods and/or service business in the areas of Defence & Aerospace, Rail & Metro, Mining & Construction, Engines and aggregates with the overarching objective of “AtmaNirbhar Bharat”. Positive Responses have been received and is under compilation.

Towards protecting the Intellectual property of the Company, the Innovation Cell has succeeded in filing 206 IPRs since setting up, including 51 IPR during 2020-21 (Upto end Dec’2020) covering innovations in product design, manufacturing and operations. Eight patents have been awarded so far. BEML Limited have also instituted Awards to identify and encourage R&D engineers.

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.

• For the year 2020-21, Company has taken up indigenization of 214 items under Atmanirbhar Bharat for Srijan Portal. Development orders have already been placed for 188 items & sample accepted for 67 items.

• The Company is also working towards ‘ZERO IMPORT’ policy and published EoIs for indigenous development of 850 items being imported. Development orders have already been placed for 663 items & sample accepted for 234 items. Further, efforts are on for indigenous development of balance items.

• BEML has entered into ToT for indigenous manufacture of High Mobility Vehicle cabins. Further, plans are afoot for local manufacture of defence spares and propulsions for Metro Cars / EMUs through JVs.

MIDHANI: MIDHANI has developed several important materials which include special steels, super alloys and titanium alloys for strategic application like Defence, Space and Energy. The indigenous development of these materials has reduced the dependency of India on import from other nations. Some of the major indigenous efforts are mentioned below.

a) High-pressure compressor disc to HAL for Adour engine of Jaguar Aircraft

b) Titanium sea water filters and high-pressure valves for nuclear submarine.

c) Composite Armour for Mi 17 helicopter.

d) Light weight body Armour product based on BhabhaKavach

e) High temperature super alloys Superni 617, Superni 740, Superfer 800L required for Advanced Ultra Supercritical Power Plants to be built in India.

f) Heaviest titanium alloy (74 kg) Castings for Naval applications

g) First time supply of titanium components & subassemblies for Nuclear Applications

h) Development of grid fin component for Gaganyaan mission of ISRO

MIDHANI has also identified 10 items for indigenisation under Make-II.
MDL:

1. MDL has set-up a dedicated Department of Indigenisation in Oct 2015 to boost and strengthen the indigenisation effort and to provide focused impetus to the Hon’ble Prime Minister’s vision of “Make-in-India”.

2. MDL has launched a separate “Atmanirbhar Bharat” Webpage in MDL website as a part of Atmanirbhar Bharat Abhiyan. The process of indigenisation, various items/equipment indigenised, items required to be indigenized (EoIs) are displayed under the webpage. The webpage is being regularly updated.

3. A compendium of items indigenised was inaugurated and published on the MDL website as a part of Atmanirbhar Bharat week to demonstrate success stories.

4. MDL has hosted 518 imported items for around Rs 2050 Crores on the MoD/DDP initiated website www.srijandefence.gov.in. MDL is interacting with the Indian firms showing interest in listed products.

5. MDL contributed Rs 25 Crores to Defence Innovation Organisation (DIO). MDL has made contribution of Rs 40 Lakhs to FORGE Coimbatore in FY 2018-19 and in FY 2020-21, contribution of Rs 40 Lakhs under CSR is made to IIT Madras Incubation Cell. DIO throws the challenges related to Defence to the Start-ups & MSMEs for the solutions. Start-ups & MSMEs are supported with the funding for prototype development.

6. Since setting up of Indigenisation Department, MDL has successfully indigenized some of the major items/equipment through the Indian Industries. Indigenisation of these items has not only resulted in considerable cost savings to the exchequer but also helped India in becoming self-reliant as far as these items/equipment are concerned. The details of the items/equipment are as under: -

<table>
<thead>
<tr>
<th>S No</th>
<th>Item / System Description</th>
<th>Earlier Source of Import</th>
<th>Now Indigenised By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bridge Window Glass</td>
<td>M/s Saint Gobain, Spain</td>
<td>M/s Jeet &amp; Jeet Glass, Jaipur</td>
</tr>
<tr>
<td>2</td>
<td>MCT Glands</td>
<td>M/s Roxtec, Sweden</td>
<td>M/s Wallmax, Faridabad.</td>
</tr>
<tr>
<td>3</td>
<td>SICADS</td>
<td>M/s Smiths Detection, Germany.</td>
<td>M/s L&amp;T(SEC), Bengaluru &amp; DRDE Gwalior</td>
</tr>
<tr>
<td>4</td>
<td>Asbestos Free Gaskets</td>
<td>M/s Naval Group, France</td>
<td>M/s James Walker -Imarco, Mumbai</td>
</tr>
<tr>
<td>5</td>
<td>E Glass cloth with adhesive tape for insulation</td>
<td>M/s Hexcel, France</td>
<td>M/s James Walker -Imarco, Mumbai</td>
</tr>
<tr>
<td>S No</td>
<td>Item / System Description</td>
<td>Earlier Source of Import</td>
<td>Now Indigenised By</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------</td>
<td>-------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>6</td>
<td>Ruch Sealing</td>
<td>M/s Naval Group, France</td>
<td>M/s Pilot Gaskets &amp; Engineers, Mumbai</td>
</tr>
<tr>
<td>7</td>
<td>High Temperature Gaskets @ 650 Deg C</td>
<td>M/s Naval Group, France</td>
<td>M/s PGE Gaskets, Mumbai</td>
</tr>
<tr>
<td>8</td>
<td>Helo Landing Grid</td>
<td>M/s Naval Group, France M/s L&amp;T, Mumbai</td>
<td>M/s Seetha Technologies, Chennai</td>
</tr>
<tr>
<td>9</td>
<td>Annealed Copper Gasket</td>
<td>M/s Naval Group, France</td>
<td>M/s James Walker -Imarco, Mumbai</td>
</tr>
<tr>
<td>10</td>
<td>Ventilation Valves</td>
<td>M/s Axima, France M/s Johnson Control, UK</td>
<td>M/s Chamunda Valves, Ahmedabad</td>
</tr>
<tr>
<td>11</td>
<td>Remote Controlled Valves (for IPMS)</td>
<td>M/s Thompson Valves, UK.</td>
<td>M/s DelVal, Pune</td>
</tr>
<tr>
<td>12</td>
<td>NBC Filters</td>
<td>M/s Axima, France</td>
<td>M/s Nikhitish Engg Pvt. Ltd, Pune</td>
</tr>
<tr>
<td>13</td>
<td>AC Plants for Submarines</td>
<td>M/s SNORI France</td>
<td>M/s Shree Refrigeration, Karad</td>
</tr>
<tr>
<td>14</td>
<td>Battery Loading Trolley for Submarines</td>
<td>M/s Naval Group, France</td>
<td>M/s SEC Industries, Hyderabad</td>
</tr>
</tbody>
</table>

7. To reduce import dependence for ongoing and future projects, the various items/equipment targeted for the indigenisation in FY 2020-21 & FY 2021-2022 are as follows:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Float</th>
<th>S.No</th>
<th>Move</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Magazine Fire Fighting System along with CFEES, DRDO</td>
<td>1</td>
<td>Ref Plant for Submarine</td>
</tr>
<tr>
<td>2</td>
<td>Battery Loading Trolley for SSK Submarine</td>
<td>2</td>
<td>Poly Chloroprene Rubber Band/ Continuity Straps</td>
</tr>
<tr>
<td>3</td>
<td>RSS Screens for Ships</td>
<td>3</td>
<td>Static Frequency Converters for Submarines (MAKE II)</td>
</tr>
<tr>
<td>4</td>
<td>GRP panel for Submarines</td>
<td>4</td>
<td>Shock Mounts for Submarines</td>
</tr>
<tr>
<td>5</td>
<td>Soda Lime for Submarines (MAKE II)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. It may be noted that contracts are awarded to Shipyards by the Indian Navy (IN) giving exact details of equipment fit in the ships/submarines. The source of procurement for majority of the equipment/items is thus frozen right at the time of conclusion of the contract, leaving little/no scope for the shipyards to suomoto effect any change both in the equipment fit or the vendor(s) from whom the equipment can be sourced. The equipment fit for each class of the ship also varies considerably. Further, the number of vessels in each project is also limited to 3 to 4 ships.
Considering the time required for building ships and the requirement of a particular equipment/item as per the PERT/construction schedule, it is generally not a feasible option to begin indigenization of the items, post award of the contract and make it available for a given project as per the required schedule, except in case of minor equipment/systems.

9. If shipyards were equipment/system manufacturers, as is the case with BEL, HAL, BDL, BEML, then it is feasible to continuously enhance indigenisation content. However, shipyards are mainly integrators, where equipment are procured from vendors and integrated as per the user requirements.

10. Shipyards use a large number of yard materials such as weld consumables, lifting appliances, electrical machineries, tools & accessories, etc. In case of MDL, most of these items which were earlier imported, have been indigenised and are now sourced from Indian vendors.

11. It is possible for shipyards to undertake indigenization of shipborne items, presently being imported, if it is known with certainty that the indigenized items would be used in designated shipbuilding projects during construction and operation life of the ships. The Indian Navy has to play a proactive role in ensuring the same.

GRSE: The last two Projects executed by GRSE namely, ASW Corvettes and Landing Craft Utility (LCU) for Indian navy has over 90% indigenous content. GRSE has indigenized 22 major shipbuilding items and has taken up ten more items for indigenisation. GRSE also has a comprehensive ‘5 YEAR INDIGENISATION PLAN’ for developing equipment worth approximately 400 Crores towards ensuring that indigenization targets for ongoing projects are met. GRSE has identified items for development under indigenisation for next five years and furnished to DDP under five year indigenisation plan.

<table>
<thead>
<tr>
<th>Sl.</th>
<th>FY</th>
<th>No. of Products</th>
<th>Name of Products</th>
</tr>
</thead>
</table>
| 1   | 2019-20  | 2 (INR 0.63 Cr) | 1. Helo Connecting Gear for RLHTS. (INR 0.13 Cr/Ship set)  
2. Mast Design, Construction and Integration on board Composite superstructure of Vessel. (INR 0.50 Cr/Ship set)  
*Indigenous development of above 02 products completed.* |
| 2   | 2020-21  | 11 (INR 144.0 Cr) | 1. 10T Telescopic Deck Crane. (INR 9.0 Cr/4 Ships)  
2. Potable Pedestrian (Assault) Bridge. (0.20 Cr/Item)  
3. Data Acquisition and Processing System (DAPS). (INR 85.0 Cr/4 Ships) |
### 5 YEAR INDEPENDISATION PLAN/ YEAR WISE MILESTONES FOR AATMA NIRMHAR BHARAT

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>FY</th>
<th>No. of Products</th>
<th>Name of Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td>4. Double Lane Portable Steel Bridges. (INR 2.0 Cr/Item)</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td>5. <strong>7 items</strong> of 1MW DA, (INR 47.8 Cr/all items for 28 ship set) viz,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>i. Alternator with Accessories,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ii. DA Acoustic Enclosure,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iii. Control Systems,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iv. Battery Charger with Accessories,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>v. Fuel Consumption Meter,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>vi. Coupling Accessories &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>vii. Base Frame.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Indigenous development of 02 product under Sl. No. 2 &amp; 4 above completed. Others are in active progress for time bound completion.</strong></td>
</tr>
</tbody>
</table>

| 3 | 2021-22 | 2 (INR 8.25 Cr) | 1. 3T Telescopic Deck Crane. (INR 3.35 Cr/4 Ships)                               |
|   |         |                | 2. HP Air Fittings & Reducing Station. (INR 4.9 Cr/4 Ships)                      |
| 4 | 2022-23 | 3 (INR 185.52 Cr) | 1. Telescopic Helo Hangar. (INR 40.0 Cr/4 Ships)                                   |
|   |         |                | 2. Magazine Fire Fighting System for various compartments storing explosive on board. (INR 144.0 Cr/8 Ships) |
|   |         |                | 3. Window Wipers. (INR 1.52 Cr/8 Ships)                                           |
| 5 | 2023-24 | 2 (INR 95.0 Cr) | 1. Horizontal offset reduction Gear box designed to transmit 4.3MW. (INR 50.0 Cr for 12 items/6 Ships) |
|   |         |                | 2. Planetary Epicyclic Gear box designed to transmit 25MW. (INR 45.0 Cr for 6 items/6 Ships) |

**GSL:** As part of Government’s efforts to achieve self-reliance in Defence Production, GSL has taken steps to support the Government’s initiative and has indigenously developed several designs of following ships / platforms included in list of 101 items for import embargo:

(i) Offshore Patrol Vessels  
(ii) Waterjet Fast Attack Crafts  
(iii) Survey Vessel  
(iv) Pollution Control Vessel  
(v) Next Generation Missile Vessel  
(vi) Multi-Purpose Vessels  
(vii) Anti-Submarine Warfare Shallow Water Crafts  

From the above indigenously developed designs, GSL has constructed & delivered Offshore Patrol Vessels, Waterjet Fast Attack Crafts and Survey Vessels to Indian
Navy, Indian Coast Guard and exported to Navies of Friendly Foreign Nations. The indigenously developed designs have saved the country’s considerable amount of foreign exchange. The delivery of ships had contribution from private industries as part of supply chain of components / services there by creating opportunity for local industry in developing and manufacturing indigenous products and achieving Government of India’s goal of self-reliance.

05 CG OPV Project: GSL has put in concerted efforts for indigenization in respect of components which were being imported hitherto to reduce dependencies on overseas vendors. For the ongoing 05 CG OPV project, GSL has successfully indigenized following major equipment which were previously imported and the details of cost savings achieved is given below:

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Equipment</th>
<th>Vendor</th>
<th>% of Indigenous content</th>
<th>Total savings (for 05 Nos Ships) Rs. in Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gear Box</td>
<td>M/s. Walchandnagar Industries Limited, Pune</td>
<td>85%</td>
<td>32.5</td>
</tr>
<tr>
<td>2</td>
<td>Steering Gear System</td>
<td>M/s. Geeta Engg Works Pvt Ltd., Thane</td>
<td>97.50%</td>
<td>1.65</td>
</tr>
<tr>
<td>3</td>
<td>Fin Stabilizer System</td>
<td>In collaboration with M/s. Naiad Dynamics, UK</td>
<td>40%</td>
<td>2.40</td>
</tr>
<tr>
<td>4</td>
<td>Heli Landing Grids</td>
<td>In collaboration with M/s FHS, Germany</td>
<td>50%</td>
<td>1.75</td>
</tr>
<tr>
<td>5</td>
<td>Water Tight Doors</td>
<td>M/s Automobile Corporation of Goa Limited</td>
<td>100%</td>
<td>0.35</td>
</tr>
<tr>
<td>6</td>
<td>Weather Tight Doors</td>
<td>M/s Zuari Engg. Works</td>
<td>100%</td>
<td>-</td>
</tr>
</tbody>
</table>

This has helped GSL in increasing the indigenous content from 62% for the previously executed similar project to 72% for the existing 05 nos Offshore Patrol Vessel project for Indian Coast Guard.

**Project 1135.6.** Under Make in India initiative, GSL has been entrusted with indigenous construction of 02 follow-on ships of Teg class (P 1135.6) and the contract was signed on 25 Jan 2019 with the Indian Navy. The execution of this project will result in developing indigenous capability in construction of high-tech Naval ships, which are hitherto being acquired from foreign countries. Many major items have been identified for indigenisation. It is likely to achieve 60-70% Indigenization content, which will be significant improvement against 02 ships being imported from Russia. With such large indigenous content, the dependency on Russian firms for spares and services support would reduce drastically.
Indigenisation road map for P1135.6 Project: GSL has identified equipment for P1135.6 Frigate project for IN for indigenisation. The year-wise indigenization plan is as given below:

<table>
<thead>
<tr>
<th>Year wise Indigenisation Plan for P1135.6</th>
<th>Sr. No.</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 2020-21</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Auxiliary Control System (ACS)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fin Stabilizers with Controls</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Steering Gear System</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Shakti EW System</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2021-22</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>HP / LP Air Compressors</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Emergency Air Compressors</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>COTS NAV radar</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>ICCP System</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Echo Sounder</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Advanced Composite Communication System (ACCS)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>LYNX U2 Gun Fire Control System</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>UASS (Upper Air Sounding System)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Anti Fouling and Anti Corrosive System</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>EM Log</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>PGD Cables</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Hull Fittings- Manholes, Ladders, Guard Rails</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Bollards of 03 Sizes</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Combat Management System (CMS)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Anchor handling fittings</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>APMS + 2MSBs</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>IRL</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2022-23</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>LED Lights &amp; Fittings</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ITTL</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>INS-SA RLG</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SWISS</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SRGM</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>AK 630</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>EON 51</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>GT intake for Boost Engine</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>GT intake for Cruise Engine</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mooring &amp; Towing fittings and Ropes</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2023-24</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Window wiper System</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Galley Items</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2024-25</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>7.5M RIBs</td>
<td></td>
</tr>
</tbody>
</table>
Modernisation of Yard. GoI has funded the modernisation of GSL yard to enhance GSL capabilities and infrastructure capacity. Infrastructure Modernisation plan is being implemented in phases of which phase 1, 2, 3A & MCMV GRP complex under Ph 4 have been completed. Implementation of balance phases (3B & MCMV Command Control Office building as part of Phase 4) are in progress. On completion of Modernisation plan, GSL will have the capability to build high technology Glass-Fibre Reinforced Plastic (GRP) vessels indigenously with the help of foreign technology provider.

MoUs/ Collaboration Agreements. Following MoUs/Collaboration agreements have been entered into/ are being renewed with foreign firms to jointly manufacture defence platforms/equipment:

(a) M/s. Naiad Dynamics Ltd., UK for indigenous manufacture and assembly of Steering Gear and Fin Stabilisers.

(b) M/s. FHS, Germany for indigenous manufacture of Heli Landing Grid, Traversing System and Hanger doors.

(c) 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 the Indian Navy.

(d) M/s. Wartsila, France to indigenously manufacture and supply of CPP Stern Gear for ships built for the Indian Navy and Coast Guard, etc.

HSL: Indigenisation is being promoted by HSL by avoiding imported equipment and sourcing equipment / machineries from domestic vendors wherever feasible and permitted. The list of items being imported and 5 year Indigenisation Plan through import substitution / MAKE II (tabulated below) has been prepared.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Year</th>
<th>Methodology</th>
<th>Item / Equipment</th>
<th>Amount (Rs Cr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2019-20</td>
<td>Import Substitution</td>
<td>Dynamic Positioning System</td>
<td>14.00</td>
</tr>
<tr>
<td>2</td>
<td>2020-21</td>
<td>MAKE-II</td>
<td>Gear Box 5.2 MW, RO Plant Alternator 5.2MW and STP</td>
<td>38.87</td>
</tr>
<tr>
<td>3</td>
<td>2021-22</td>
<td>MAKE-II</td>
<td>Flight Deck safety net system</td>
<td>2.00</td>
</tr>
<tr>
<td>4</td>
<td>2022-23</td>
<td>MAKE-II</td>
<td>Air vent hoods of NW300 &amp; above sizes</td>
<td>1.50</td>
</tr>
<tr>
<td>5</td>
<td>2023-24</td>
<td>Import Substitution</td>
<td>Pneumatic Quick Closing valves</td>
<td>4.20</td>
</tr>
</tbody>
</table>
Following efforts have been made by HSL in order to harmonize Defence Procurements with the ‘Make in India’ initiative:

(a) Provisions contained in ‘Public Procurement (Preference to Make in India), order 2017’, issued by DPIIT, Ministry of Commerce and Industry, have been incorporated in Purchase Manual for implementation.

(b) MAKE-II Procedure has been incorporated in the Purchase Manual in order to indigenize imported items through development of prototype.

(c) Relaxation of norms (prior experience and prior turnover) for MSMEs and start-ups in all public procurements, subject to meeting quality and technical specifications.

(d) Alignment to payment terms i.e; provision of advance payments to MSMEs.

(e) Deemed registration of vendors (Vendors registered in other Defence PSUs are to be considered as deemed Registered).

(f) Efforts are being made to identify Tier-I & Tier-II Vendors so as to facilitate development of import substitutes.

(g) ‘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.

(h) 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 imported to be Indigenised, 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.

(i) A direct link to the ‘Make in India’ Page of GoI (http://www.makeinindia.com) has also been provided in the portal.

Further, following are the steps taken by Department of Defence Production to enhance their export potential so that the country become an exporter of defence equipment:
a) Export Promotion cell under DDP, MoD is formed to co-ordinate and follow-up on export related action including enquiries received from various countries and facilitate private sector and public sector companies for export promotion.

b) Defence Attaches have been mandated for export promotion of Indigenous defence products of both public and private sector. Also a scheme for Export promotion of Indian Defence Equipment Manufactured in India by Indian Defence Attache has been rolled out wherein Defence Attachés are provided financial support to promote export of indigenous defence equipment abroad.

c) Subject to strategic considerations, domestically manufactured defence products are being promoted through Lines of Credit/Funding. Defence Lines of Credit (LOCs) are extended to sovereign governments to enable buyers in those countries, to import goods and services from India on attractive credit terms.

d) An export booklet containing all the major platforms/systems/sub-systems of DPSUs/OFB and private companies dealing in manufacturing of defence products was conceptualized, published and circulated to all the Missions abroad. It is also available on DDP website.

e) An online portal has been created through which export leads received from various stakeholders are being disseminated directly to the Indian Defence Exporters who are registered on the portal.

f) In order to boost defence exports, webinars are being organized with Friendly Foreign Countries (FFCs) under the aegis of DDP, MoD through Industry Associations with active participation from Indian Defence Industries.

g) Geographical countries/regions have been allocated to DPSUs/OFB for focused export promotion of Indigenous Defence Platforms/equipment in their countries of allocation.

Efforts undertaken by the DPSUs to boost Defence export are enumerated as under:

**HAL:** So far, HAL’s Exportable Platforms have been Advanced Light Helicopter (ALH) Mk III–Dhruv and Do-228 aircraft. Presently, in the rotary wing side ALH-Mk-IV & Light Combat Helicopter (LCH) and in the fixed wing segment and Light Combat Aircraft (LCA)-Tejas have also 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 in the export market. With the introduction of above Platforms in the Export Market, HAL envisages the enhancement in Exports in the coming years.
HAL has adopted multi-pronged approach for enhancing exports with major activities as below:

1. **Export Strategy:**

HAL has drawn up an elaborate Export strategy. Extensive Market study has been done and Target Countries in 4 regions namely SAARC, South East Asia, Africa and Indian Ocean regions have been identified for export of HAL Products & Services. In addition Latin America and Middle East countries are also being explored for possible Business opportunities.

In Oct 2020, eight select countries have been allocated to HAL by Export Promotion Cell (EPC), MoD, for promotion of Products & Services of entire Indian Defence Industry.

Notwithstanding the above, Global RFI/RFPs are also being tracked and responded wherever HAL Platform/Products matches the requirement.

2. **Establish Marketing & Distribution / Service network abroad:**

As on date, HAL has engaged Channel Partners in several of the shortlisted Target Countries. The engagement of Channel Partners/Marketing Agent/Distributors/Business Development Consultants for promotion of Export business in other target Countries are in process, on an on-going basis.

3. **Interaction with Defence Attaches / Missions:**

Regular interactions with the Defence Attaches / Indian Missions in the target countries. Further to the above, regular interactive sessions with Foreign Defence Attaches / Foreign Missions are also being conducted in order to establish rapport and formal network for gathering Business Intelligence

4. **Foreign Supplier Registration:**

In order to track / receive Global RFI/RFPs directly from the customer, HAL has registered in the procurement portals of various Countries. Registration in other countries is also being done on on-going basis.

5. **Export through G-2-G route:**

Export opportunity is also being pursued through G-2-G channel in certain target countries which follows G-2-G route for Platforms namely Do-228 and ALH. The effort includes exports utilizing GoI Line of Credit (LOC).
6. Offsets / Association with Global players:

HAL has been leveraging Defence Offset business opportunities & accruing benefits including the exports from Defence Offset arising out of Indian MoD Contracts/Programs. HAL has signed Letter of Intent / MoU as Indian Offset Partner for liquidating Offsets with various leading global OEM’s.

7. Branding & Promotion:

As part of Brand building and Promotion for reaching out to prospective customers, HAL has been participating in prestigious International Air Shows & Exhibitions considering the business opportunities in the region. Also HAL is the Nodal Agency for organising Aero India and Defexpo, which helps to project the Company’s Brand Image.

Flying display by joint participation with IAF and other Stake holders like ADA to showcase the capabilities of HAL Products to Overseas Customers is also being undertaken.

8. International Certification of HAL Platforms for Civil use:

The process of obtaining International Certification is in progress and this will help HAL Platforms export in the civil market.

Interactions with EASA, Germany was held along with DGCA. In-principle consent was received that DGCA could give type certification for HAL built Do-228. Similarly EASA certification for Dhruv-ALH is also being progressed.

9. Efforts in other diversified areas:

Following are other potential areas being targeted for enhancement in export sales apart from sale of Platforms & ROH Business:

- Pilot Training.
- Aircraft Upgrades.
- Indigenous upgrade on Licenced platform.
- Design Work Packages
- Export of indigenously Designed & Developed Avionics

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 MoEA, 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 markets 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 turnkey solutions based on its software capabilities & Artificial Intelligence under secure environment.
- Participate in 3 to 4 International exhibitions every year.

**BEML:** BEML has organized Webinars in Senegal, Kenya, Zambia, Azerbaijan, Saudi Arabia, Abhu Dhabi, Oman and Sri Lanka for promotion of Defence exports.
BEML has written to 25 Defence Attaches in Africa, Middle East & Neighbouring Countries for export of Defence products and had a discussion with Sri Lanka Defence attaché for supply of Aircraft Towing Tractor (ATT).

BEML has registered with Defence Portals of Foreign Countries like Philippines and Singapore.

Kenya region has been allotted to BEML by DDP for carrying out all the export promotional activities on behalf of all DPSUs / OFB. BEML branch office at Kenya has been registered on 28th Jan 2021.

BEML has floated Global EoI for widening the market network through appointment of authorised representatives and service provider. BEML has planned to appoint representative in Africa, Middle-East and Neighbouring Countries and has already appointed representative for Defence products in Bangladesh.

BEML is on the verge of receiving order for Aircraft Towing Tractor (ATT) from Bangladesh Air Force. Further, orders for Heavy Recovery Vehicle (HRV) and Pontoon Bridging System (PMS) under Indian Defence Line of Credit are being pursued in Bangladesh.

BEML has organized Global outreach program with EXIM Bank of India and ECGC for Promotion of BEML Defence products through EXIM Bank’s Global offices. BEML has signed 8 MoUs in DefExpo-2020 and 11 MoUs in Aero India-2021 to further enhance the exports of Defence equipment.

**BDL:** BDL has proved itself during the last four years and achieved turnover on an average of Rs. 4000 Cr. per annum. BDL has also established its capacity to meet the requirement of IAF CMDS and many platforms are fitted with BDL CMDS.

Apart from regular supplies to Indian Armed Forces, BDL is also exporting Torpedoes to friendly neighboring 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 which 2 orders has already executed and balance two orders will be completed in 2020-21.

Capacity enhancement by modernisation has also been done which will be helpful for further export. of ATGMs and SAM. 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 thrust on Export of Weapon Systems.
MIDHANI:

Inadequate capacity utilization and Defence Exports: MIDHANI has been fully utilizing its capacity towards manufacture of Special alloys. MIDHANI focuses on export of Titanium, Super alloy based products. In FY 19-20, about Rs 11 Cr. export sales has been achieved. In FY 19-20, the following steps have been taken by MIDHANI to improve exports:

a) NADCAP certification is under process to target global aerospace market

b) MIDHANI registered as a Vendor in EGYPT Defense Production Unit - HELWAN ENGINEERING INDUSTRIES COMPANY.

c) 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.

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

• Global Export Participation

<table>
<thead>
<tr>
<th></th>
<th>Projects</th>
<th>Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFI Response</td>
<td>27</td>
<td>140</td>
</tr>
<tr>
<td>RFP Response</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>196</td>
</tr>
</tbody>
</table>

• Agency Agreement signed for following Countries:

  ➢ Egypt, Israel, Middle East, Myanmar, Ghana, Nigeria, Sierra Leone, Niger, Liberia, Philippines, Bangladesh
  ➢ 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
• Already approached Indian Embassies, High Commissions located in several countries

**Proposed Steps for Creating assets for the Blue Water Economy**

MDL under its corporate plan has emphasized on creation / development of new infrastructure facilities to meet its future business requirements. In this context, the last major CAPEX was executed between year 2010 to 2016 at an estimated cost of Rs. 1034 Cr. Further it is also decided to identify the shortcomings of infrastructure considering future projects which are likely to be announced by Indian Navy from year 2020 to 2030 and the Refit market for commercial vessels.

**GRSE:** The shipyard has 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 Medium/ Small ships) concurrently. Presently, GRSE has the order for construction of 17 warships & other vessels which includes 02 Nos. ships for export. Upgradation of facilities of Raja Bagan Dock (RBD) unit of the company is underway. On completion of this upgradation by FY 2023-24, the shipbuilding capacity will increase from 20 to 24 ships concurrently. For continually utilizing the augmented capacity in future, GRSE has responded to RFPs/RFIs of Indian Navy and Indian Coast Guard for construction of around 40 Ships.

Inline with MoD thrust on Defence Exports, GRSE is exploring opportunities to grab export orders for major platforms (warships & other vessels). GRSE has also adopted a strategy of engaging with the authorities of the target market countries for export of its products. The company is also regularly supplying Bailey-type portable steel Bridges and its components to the neighbouring countries such as Nepal & Bhutan and efforts are on to further enhance the export of portable steel Bridges.

As part of continual and committed endeavor towards Export Promotion, GRSE has taken up aggressive marketing initiatives and also appointed Marketing Reps in foreign countries such as Phillipinies, Myanmar& Bangladesh.

GRSE also intends to participate in Philippines Corvette Acquisition Programme (PCAP) under G2G Agreement with favourable Line of Credit (LoC). GRSE is negotiating with various authorities of Bangladesh for supply of different types of Vessels and recently
emerged as lowest bidder against Global Tender for supply of 08 Nos. FRP Patrol Boats for Bangladesh Fisheries.

As a result of continual and relentless marketing initiatives, GRSE has recently bagged the following major export orders as follows:-


(ii) Export order of Rs. 100 Cr. Approx. for supply of 01 No. Fast patrol Vessel Govt. of Seychelles. Contract signed on 03 Feb 2021.

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) GRSE can provide Bulk Carriers, Passenger Ferries, Barge, Pontoon, Tug, Offshore Patrol Vessel for Short Sea Shipping.

(iv) 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.

(v) Appropriate vessels for the activity can be designed & built by GRSE as per specifications to commercialize ocean debris collection and offer support to small island states.

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

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>2021-22</th>
<th>2022-23</th>
<th>2023-24</th>
<th>2024-25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports (Rs. Cr)</td>
<td>300**</td>
<td>300**</td>
<td>300#</td>
<td>300#</td>
</tr>
</tbody>
</table>
FY 2020-21 to 2022-23:

** Export figure for above Financial Years includes the following:

- Proposal for construction and delivery of Landing Ship Tank and Cadet Training Ship for Nigerian Navy. LoC is approved by MEA. Cabinet approval is awaited from Nigerian side.

- Supply of 04 FIBs for Comoros and 01 Floating Dock to Sri Lanka are under active consideration by Govt. of India.

- Training to Myanmar Navy.

FY 2023-24 to 2024-25:

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

a) 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, Maldives, Vietnam, Indonesia, Madagascar, Qatar, West Africa for design and construction of different variants of vessels/platforms. Response is awaited from these countries. Further GSL is participating in various exhibitions and showcasing its product range and advance technological capability to increase the export turnover. In the recent past, GSL has participated in the following Physical and Virtual Exhibitions:

**Physical Version:**

- DEFEXPO 18, Chennai.
- ARMY 2018 in Russia,
- Euro Naval 2018 in France,
- ARMY 2019 in Russia,
- IDEX 2019 in Abu Dhabi,
- LIMA 2019 in Malaysia,
- ISDEF 2019 in Israel,
- DSEI 2019 in UK
- DEFEXPO 2020 in Lucknow.
• ARMY 2020 in Russia,
• AERO INDIA 2021 in Bengaluru

On Line (Virtual) Version:
• Euronaval 2020 - in Paris, France.
• Korea Maritime Trade Show (KOMTS-20)
• Bharat Shakti Defence Attache Conclave
• FICCI Global Defence Cooperation

Blue Water Economy:-

(i) 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 of the major shipbuilders in the country, has been provider of various kinds of vessels, systems and related marine products. These include the following:

(a) Offshore Patrol Vessels, Pollution Control Vessels, Interceptor Crafts, Fast Attack Crafts and 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 has constructed a ferry for the Varanasi terminal. 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 to various foreign countries, thereby contributing to the exports.

(ii) **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:** Hindustan Shipyard Ltd., strategically located on the East Coast of the Indian peninsula, at Visakhapatnam, Andhra Pradesh, is engaged in shipbuilding, ship repairs, submarine construction and refits as well as design and construction of sophisticated state-of-the-art offshore and onshore structures. Direct sea access, excellent infrastructure, skilled work force, rich expertise garnered over the years in building 193 vessels (including 11 wellhead platforms) and repairing 1986 vessels of various types enable HSL to offer competent services for the defence and maritime sectors. The yard was brought under the administrative control of the Ministry of Defence on 22 Feb 2010. 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 started making profits. However, 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.

**Extreme Cold Weather Clothing System**

**Recommendation No. 18**

The Committee observe that Extreme Cold Weather Clothing System (ECWCS) which is a three layer clothing being procured for soldiers deployed in Super High Altitude Areas like Siachen. The Committee were apprised that for it, quality of supply is monitored and the procurement is based on effectiveness of the item determined through user trials carried out under actual operational conditions. It is also ensured that procurement is done only from user approved sources and DGQA make certain that there is zero deviation between bulk supply and user approved sample determined. In addition, user satisfaction on quality during usage is monitored through suitably feedback processes. In case of any quality issue during usage, the user can raise a defect report as per Army Order 323/166, based on which detailed technical investigation is then carried out by DGQA to verify the claims of the user and ascertain reasons for defect.

**Recommendation No. 19**

The Committee find under Private Sector Participation for Extreme Cold Weather Clothing System (ECWCS) all the present user approved sources are private manufactures, whether foreign or Indian and out of these, one is an indigenous manufacturer. The Committee hope that in due course of time after the implementation of DAP 2020, the Ministry would take proper steps to promote indigenous production of ECWCS and explore more possibilities of manufacturing it in the country. The Committee also desire that the Ministry of Defence should put in place a definite mechanism to ensure that the end product should be at par with the foreign products in terms of quality.

**Reply of the Government**

The replies on Recommendation Nos. 18 and 19 have been termed as “classified” by the Ministry and have been forwarded to Hon’ble Chairperson in a sealed cover. These replies have been placed under ‘accepted’ category.
Offset Clause

Recommendation No. 20

The Committee note that Offsets under Defence Capital Acquisition were introduced in the Defence Procurement Procedure (DPP) in 2005 based on the recommendation of Kelkar Committee. The Offset guidelines in DPP have been amended 6 times thereafter. As per Defence Acquisition Procedure (DAP 2020) offset provisions are applicable only on “Buy Global” categories of capital acquisitions. The offset provisions apply in capital acquisition contracts which are more than Rs. 2,000 crore. However, the offsets are not applicable to procurements under “Fast Track Procedure” and in “Option Clause” cases if the same was not envisaged in the original contract. No offsets will be applicable in all ab-initio Single Vendor Cases including procurements based on Inter Governmental Agreements /Foreign Military Sales (IGA/FMS). It is relevant to note that offset applicability on Indian companies under ‘Buy Global’ cases do not arise in case the indigenization component is 30% or more. Offset contracts are co-terminus with the main procurement contract and signed along with the main procurement contract after approval of Competent Financial Authority (CFA). The period of offset discharge can be extended on exceptional ground by a maximum period of 02 years. The DAP stipulates eligible products/services for discharge of offset obligations which covers defence products and Maintenance, Repair and Operations (MRO) related to helicopters and aircrafts. The responsibility for fulfilment of offsets obligations lies with the main vendor.

However, the vendor is permitted to discharge his obligations through Tier-I sub-vendors based on their work share. In case of investment and/or transfer of technology the offset discharge can be permitted by entities other than vendor/Tier-I Sub-vendor on case to case basis. The vendors are free to select their Indian Offset Partners (IOP) from DPSU/OFB/DRDO/Private Industry. The Offset Policy further allows vendors to submit offset details at later stage after signing of the contract i.e. either at the time of seeking offset credits or one year prior to discharge of offset obligations.

Reply of the Government

No Comments, being a matter of fact.

Recommendation No. 22

While appreciating that the Defence Offset Monitoring Wing is effectively discharging its duties, the Committee recommend the Ministry to be more cautious and transparent as the scope of Offset has been increased from Rs. 300 crore to Rs. 2,000
crore or more. The Ministry should also try to establish some import substitute products industry while discharging the 30 per cent obligation.

Reply of the Government

In the Defence Offset Guidelines, which has been promulgated as part of Defence Acquisition Procedure (DAP) 2020, the following reforms have been done:

i) The thrust of Guidelines is to have enabling provisions to attract investment and technology.

ii) It is expected to enhance capability in the domestic defence manufacturing sector and promote ‘Make in India’ initiative.

iii) Investment in defence manufacturing including in Defence Industrial Corridor could be through FDI.

iv) The eligible defence products have been streamlined to ensure high technology based investments through offsets.

v) To incentivise transfer of technology to Indian industry/DRDO/OFB/DPSUs and to attract direct investment, higher multipliers have been provided.

vi) Higher preference has been given for purchase of defence products as compared to components.

vii) Investments have been incentivised through higher multipliers:

viii) Discharge of Offset obligations through entities other than vendor/Tier-I sub-vendor has been envisaged for investments/ Transfer of Technology on case to case basis.

ix) Flexibility to provide details of products and Indian Offset Partners (IOPs) at later stage even after signing of contract.

x) End-to-end online submission and verification of offset claims through the offset portal to ensure greater transparency, accountability and efficiency.

Recommendation Nos. 23 & 24

Recommendation No. 23

The committee find that in spite of the Make in India Policy executed by the Government, there exist imports in terms of value and percentage in the Defence
Production Units. In OFB as already brought out, the average import rests around 8.5% in 2019-20. In HAL, which is currently manufacturing platforms for various aircraft, the import content in value terms is around 35 percent. In BEL, the import content uptil 3rd quarter of 2020-21 is around 28 percent which was merely 34% in the year 2015-16. Likewise, in BEML, the import content upto September, 2020 was 16.76% in terms of net value of production. In BDL, during 2019-20, it registered 10% in comparison to 7.7% during 2016-17. MDL has intimated that their import content for the warships and submarines under construction ranges between 58% to 70% the import content of GSL upto December, 2020 was 25% which was increased from the average of about 19% in 2019-20. GRSE has also supplied its figures which have also increased to 12.38% upto 2nd quarter of 2020-21 from that of 6.95% during the year 2019-20. HSL has also maintained almost the same figures in terms of import content which is around 26.29% between April to December, 2020 in comparison to 21.09% during the year 2019-20.

Recommendation No. 24

While taking note of the above figures in regard to import contents, the Committee at this stage would not like to recommend anything which would adversely affect the pace and quality of the production of various assets. Nevertheless, they would like to be apprised of the concrete steps taken to reduce the import contents in future. They would also like to recommend that all-out concerted efforts be undertaken not only within the Defence Production Units but from private manufacturers also by sharing their co-expertise developed in terms of research and development. The detailed note may be supplied to the Committee for their perusal at the time of furnishing the Action Taken replies.

Reply of the Government

Department of Defence Production is striving hard and making all possible efforts to make India a self-reliant country. Following are measures and concrete steps to reduce the Import Contents in future.

1. The Department of Defence Production has notified “Policy for Indigenization of components and spare used in Defence platforms for DPSUs/OFB” on 08 March, 2019. The objective of the Policy is to create an industry ecosystem which is able to indigenize the imported components (including alloys & special materials) and sub-assemblies for defence equipment and platform manufactured in India and to leverage the said capability to create export market.

2. SRIJAN portal (srijandefence.gov.in) to promote indigenization was launched on 14 Aug 2020. As on date i.e, 24.06.2021, 10714 items, which were earlier imported by DPSUs//OFB/SHQs, have been displayed on the portal. The Indian
industry has shown interest for 2799 displayed items so far. DPSUs/OFB/SHQs are interacting with these industries for indigenization of the items as per extant procedures.

3. DPSUs/OFB/SHQs have indigenized/placed SO for 1753 items (spares and components) in 2020-2021.

4. Long Term Orders - "Framework for placing Long Term Orders by DPSUs" has been approved by Hon'ble Raksha Mantri on 04 Nov 2019. Under this Framework, the procuring organization may aggregate demand of the item for a long period of up to 10 years, in cases where it finds challenges in indigenization.

5. Positive lists of Indigenisation: Ministry of Defence has notified two positive list of items, for which there would be an embargo on the import beyond the timeline indicated against them. This is a big step towards self-reliance in defence. This offers a great opportunity to the Indian defence industry to manufacture these items using their own design and development capabilities to meet the requirements of the Armed Forces. The first list of 101 items was released in Aug 2020 and 2nd positive list of Indigenisation of 108 defence has been in May 2021. This list includes some high technology weapon systems like artillery guns, assault rifles, corvettes, sonar systems, transport aircrafts, light combat helicopters (LCHs), radars, Helicopter with all up weight, Next generation corvette, Border Surveillance system, Land Based MRSAM weapon system, Rocket RGB-60 HE with fuse, Amoured Dozor, Anti –material Rifle, Counter Mine Flail, Instant fire Detection and suppression system for tanks and many other items to fulfill the needs of our Defence Services.

6. MDL has progressively increased the Indigenous content in Shipbuilding projects. The indigenous content has been increased from 42% in Project 15 (Import content 58%) to 75% in ongoing Project 17A (Import content 25%) and 72% in Project 15A (Import content 28%).

Further, DRDO has taken following initiatives to reduce import content and to promote indigenisation:

i). **New Transfer of Technology (ToT) policy:** ToT policy with nil ToT fee for Development Partner cum Production Partner (DCPP)/Development Partner (DP)/Production Agency (PA) industry. Also nil royalty will be charged from industry for supply to Services MHA/Govt. agencies. 2% royalty will be chargeable for export and products for commercial markets.
ii). **Industry as Development cum Production Partner (DcPP):** DcPP / Production Agency (PA) / Lead System Integrator (LSI) participation for Mission Mode and System level Technology Demonstration Projects.

iii). **Technology Development Fund:** Technology Development Fund (TDF) has been established to encourage R&D and indigenization by industry. Under this scheme, uptoRs 10 Crores granted to encourage participation of public/private industries especially Ministry of Micro, Small and Medium Enterprises (MSMEs)/Startups and to promote Self-Reliance in Defence Technology by design and development of technologies/prototypes; Indigenisation of imported systems/components and new systems as part of Make-in-India Initiative.

**Recommendation No. 25**

The Committee note that the Government of India has enhanced FDI in Defence Sector up to 74% through the Automatic Route for companies seeking new defence Industrial license and up to 100 % by Government Route wherever it is likely to result in access to modern technology. The Committee was given to understand that this FDI limit was increased from 49% to 74% to ensure that it will come along with the technology also. The FDI limit has been made attractive enough to make the foreign investors share their technology also otherwise, they will have the control of the entire company. The Committee are convinced with the idea of the Ministry but desire that the Ministry should ensure that despite raising the limits of FDI to as high as 74% the purpose of self-reliance should not be defeated. In this context, the Committee recommend that in addition to the measures taken for making FDI more attractive, focused efforts may be undertaken by the Ministry to strengthen R&D base of the country so that the technologies/systems/accessories intended to be made available in the country through the FDI route be cent-percently designed and developed by Indigenous defence sector.

**Reply of the Government**

Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry vide Press Note No. 4 (2020 Series) dated 17.09.2020, has allowed FDI under automatic route upto 74% and above 74% through government route wherever it is likely to result in access to modern technology or for other reasons to be recorded. Further, in order to boost research and development infrastructure in the country, Department of Defence Production (DDP) has taken below mentioned measures –
i. Defence Acquisition Procedure (DAP)- 2020 promulgated in Oct 2020 is driven by the tenets of Defence Reforms announced as part of ‘Aatmanirbhar Bharat Abhiyan’.

ii. In order to promote indigenous design and development of defence equipment ‘Buy {Indian-IDDM (Indigenously Designed, Developed and Manufactured)}’ category has been accorded top most priority for procurement of capital equipment.

iii. The ‘Make’ Procedure of capital procurement has been simplified. There is a provision for Government funding up to 70% of the prototype development cost for Design & Development of equipment, systems, major platforms or upgrades thereof.

iv. Procedure for ‘Make-II’ category (Industry funded), introduced in DPP-2016 is aimed at encouraging indigenous development and manufacture of defence equipment. The procedure incorporates number of industry friendly provisions such as relaxation of eligibility criterion, minimal documentation, provision for considering proposals suggested by industry/individual etc.

v. An innovation ecosystem for Defence titled Innovations for Defence Excellence (iDEX) has been launched in April 2018. iDEX is aimed at creation of an ecosystem to foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, Start-ups, Individual Innovators, R&D institutes and Academia and provide them grants/funding and other support to carry out R&D which has potential for future adoption for Indian defence and aerospace needs.

vi. Reforms in Offset policy have been included in DAP 2020, with thrust on attracting investment and Transfer of Technology (ToT) for Defence manufacturing, by assigning higher multipliers to them.

vii. Government has notified the 'Strategic Partnership (SP)' Model in May 2017, which envisages establishment of long-term strategic partnerships with Indian entities through a transparent and competitive process, wherein they would tie up with global Original Equipment Manufacturers (OEMs) to seek technology transfers to set up domestic manufacturing infrastructure and supply chains.

viii. Under Buy and Make (Indian) category of DAP-2020, Indian vendor(s) can tie-up with a foreign Original Equipment Manufacturer (OEM), for indigenous production involving transfer of technology of critical technologies.

ix. Buy(Global-Manufacture in India) category of DAP-2020 refers to an outright purchase of equipment from foreign vendors, in quantities as considered necessary, followed by indigenous manufacture of the entire/part of the equipment and spares/assemblies/sub-assemblies/maintenance along with repair and overhaul (MRO) facility (only in cases where these are part of the main contract) for the equipment, through its subsidiary in India/through a joint
Venture/through an Indian Production Agency (PA) (with ToT of critical technologies to the Indian PA), meeting a minimum of 50% Indigenous Content (IC) on cost basis of the Base Contract price.

In order to strengthen R&D base in India DRDO has taken the following steps:

1. **New Transfer of Technology (ToT) policy:** ToT policy with ‘nil’ ToT fee for Development Partner cum Production Partner (DCPP)/Development Partner (DP)/Production Agency (PA) industry. Also nil royalty will be charged from industry for supply to Services MHA/Govt. agencies. 2% royalty will be chargeable for export and products for commercial markets.

2. **Industry as Development cum Production Partner (DcPP):** DcPP / Production Agency (PA) / Lead System Integrator (LSI) participation for Mission Mode and System level Technology Demonstration Projects.

3. **Technology Development Fund:** Technology Development Fund (TDF) has been established to encourage R&D and indigenization by industry. Under this scheme, upto Rs 10 Cr is granted to encourage participation of public/private industries especially Ministry of Micro, Small and Medium Enterprises (MSMEs)/Startups and to promote Self-Reliance in Defence Technology by design and development of technologies/prototypes; Indigenisation of imported systems/components and new systems as part of Make-in-India Initiative.

4. **Dare to Dream Innovation Contest:** Pan India contest for promotion/support to innovators/Start-ups against the defined requirements has been launched.

5. **Exclusive Technologies/Systems for Industry to Develop:** In Aug 2020, in line with the aim of ‘Atmanirbhar Bharat, DRDO has identified a list of 108 systems (hosted on DRDO website) which will be designed, developed and manufactured by industry only and will not be taken up by DRDO itself for development. DRDO may provide scientific/technological support and testing support wherever required for the development of these systems and subsystems on case to case basis.

6. **Positive List of Indigenisation:** Negative list for import of 1037 Systems/Sub-Systems/Components has been forwarded to Dept. of Defence Production, of which a number of items were placed in the 101 import Ban list promulgated by DMA. The 2nd list promulgated by DMA also has DRDO developed systems.

7. **Access to Test Facilities of DRDO:** Test Facilities of DRDO are extended to Indian Industry on payment basis.
8. **Free Access of DRDO Patents:** Policy for free access of DRDO Patents by Indian Industries has been implemented.

9. **DRDO Procurement Manual-2020 (PM-2020):** A new version of highly simplified and industry friendly DRDO Procurement Manual-2020 (PM-2020) released by Hon’ble RM to encourage more participation of Indian industry, including start-ups and MSMEs in Defence R&D for achieving ‘Aatmanirbhar Bharat’.

10. **MoUs with Defence Industrial Corridors:** MOU has been signed with Tamil Nadu and UP Defence Industrial Corridors to impart skill training, hand-holding and providing guidance in all aspects related to technology.

11. **Introduction of Defence Courses:**
   - PG & Diploma Courses at Gujarat University, Ahmedabad and Elective Courses in B. Tech at IITRAM, Gandhinagar - MoUs signed and course have started from 3rd Feb 2021.
   - Syllabus for M. Tech. in Defence Technology (compulsory & elective courses) has been finalised in collaboration with AICTE & DRDO Labs. Regular course on M. Tech. in Defence Technology has been included in the Approval Process Handbook (APH) 2021-22.

12. **DRDO-MoE Collaborative Ph.D. Programme:** DRDO-MoE Collaborative Program for Ph.D. students to work on current problem areas related to defence technologies. Ph.D. scholars registered with selected universities can carry out research work in DRDO labs on mutually agreed problems related to defence technologies. The Ph.D. scholar shall be guided by University and DRDO lab shall provide the co-guide.

13. **Paid Apprenticeship Scheme:** DRDO aims to improve the skill of manpower required at different level for defence R&D and manufacturing in private industry. 3500 skilled operators / supervisors / engineers shall be trained each year at DRDO labs. The apprenticeship will be of one year duration. Stipend shall also be paid as per Ministry of Labour guidelines.

14. **Certificate courses on AI & Cyber Technologies for 1000 graduates each:** Both courses (first batch) successfully completed – 500 each. Second batches have started.

15. **Internship at DRDO Labs:** Internship to 5000 Engineering Students / Research Scholars is being arranged every year in DRDO labs to promote research culture amongst youngsters.
R&D efforts put on by the DPSUs are described as under:

**HAL:** Aerospace domain is a highly technology intensive domain and R&D is a thrust area at HAL. HAL has 10 R&D centers working on different technology segments in the Aerospace domain, both for fixed wing and rotary wing platforms. HAL spends around 6- to 8% of its sales towards R & D. Further, to enhance its thrust on R&D, HAL has created a R&D Corpus with contribution of 10% of operating profit after tax.

HAL has its credit designed and developed 17 state-of-the-art indigenous products which include Advance Light Helicopter (ALH), Light Combat Aircraft (LCA), Light Combat Helicopter (LCH), Light Utility Helicopter (LUH), Basic Turboprop Trainer Aircraft (HTT-40).

The major Design and Development programs currently progressing at HAL include LCA Mk1A, Indian Multirole Helicopter (IMRH), 200 kg RUAV, 25kN Turbo-Fan Engine, 1200KW Turbo-Shaft engine. In addition, HAL is the principal Design partner with ADA for Design and development of LCA MK II and AMCA.

In addition, various other technology development projects have been launched to increase self-reliance in critical areas like Engines, Aircraft Display Systems, Mission Computers, Aircraft Flight Control Systems for Helicopter etc. HAL has tied up with premier academia in the country and has established 6 Chairs at IITs / IISc for conducting research and product development activities on niche areas.

HAL believes in inclusive growth and has been instrumental in nurturing a competitive aviation eco-system in India by way of collaborating with private industries as outsourced partners. More than 30% of HAL’s man-hours have been outsourced including several critical work packages, resulting in enhancing the manufacturing capability of Indian private sector including MSMEs. HAL aims to be a lead aerospace integrator, primarily through robust private partnership. HAL is also utilizing private vendors in design and development of systems, examples include Smart Cockpit Display System, Multi-Function Display, Solid State Flight Data Recorder etc., to name a few.

MRO facilities have been established by HAL to support its products for the entire life cycle of products. MRO facilities are established for airframe, engines, avionics and accessories to meet the annual arising from the defence services.

With probable orders to be received for Light Combat Helicopter (LCH), Light Utility Helicopter (LUH), HTT-40, addl SU-30MKI aircraft along with existing orders for LCA
MK1A and ALH, the need to ensure maximum utilization of existing Defence & Aerospace facilities in the country under “Make in India”, will be fulfilled.

**BEL:** BEL generally does not import fully finished Defence equipment. However, for the design, manufacture & supply of Defence equipment, the company resorts to imports only for some of the special Components/Raw materials, proprietary items/sub-systems etc., (input material) that are not being manufactured in the country. Around 87% of BEL’s turnover, on an average is, generated from products based on indigenous technology and the remaining mere 13% is on foreign ToT. The import content during 2019-20 was around 27% on value of production. BEL continuously strives to minimize the dependence on import of these items through consistent efforts on indigenization, outsourcing from domestic industry, vendor development, and collaborative R&D process involving Indian Private Industry including MSMEs etc.

Towards achieving the objectives of self-reliance by continuous reduction in imports, BEL has evolved clear Roadmaps for Indigenization, including Make-II process and Collaborative R&D projects to develop products. Some of the major specific measures deployed to enhance indigenization to minimize import content are listed below:

- Items with large quantities & high future business potential are being targeted for Indigenization. 100 such items have been uploaded in BEL Website. Projects with order available or higher probability of acquisition are selected on priority. Projects with estimated prototype cost of upto Rs.25 lakhs are reserved for MSMEs/Start-ups.

- Commonly Generic items are being targeted to build indigenous vendor base (Crystals, Filters, Power Supply, Convertors, Mechanical items, Raw Materials, Transformers, Connectors, and Cables etc).

- EoIs for 56 items under Make-II have been published on BEL’s e-Procurement portal. Responses received for 29 items and are in various stages of indigenization. Till date, 1900 items are uploaded on 'Srijan' (DDP) Portal for indigenization.

- Preference to indigenous components/Sub-Assemblies over imported without compromise on quality & certification requirements.

- As part of CPSE Conclave action points of GoI, BEL has identified specific projects for Indigenization as part Challenges pertaining to "Minimizing Import Bill" and "Integration of Innovation & Research" through which various projects have been taken up for indigenization in collaboration with other CPSEs/OFB.
- Indigenization is one of the major avenues of BEL's Cost Reduction efforts where the company sets annual targets for achieving. Reduction in Import as a % of Revenue from Operations over the previous year is one of the Performance Criteria under MoU signed with Ministry.

- Import bill reduction can be achieved through self-reliance in terms of manufacturing as well as design & development within the country. Following steps are being taken in BEL to enhance indigenization:

**R&D:** With an aim to reduce the need for foreign ToT based products (which involve heavy imports), BEL will continue to take the following steps towards design & development of products indigenously:

  - Collaborations with National Labs (e.g., DRDO), academia and societies:

    - Import substitution of several expensive Modules & sub-systems in various business segments. These include: Maritime Domain Awareness-Decision Support Software for NC3I, Radars (e.g., Coastal Surveillance Radar, Compact Tactical Surveillance Radar, X-Band Active Phased Array Radar), Head Up Displays (e.g., Su-30 Aircraft), Digital Mobile Radio (DMR), Satellite On The Move (SOTM) (e.g., Ku Band SOTM), Chassis (e.g., Dip Brazed Chassis for Digital Flight Control Computer (DFCC), Power Systems (e.g., PSU of Atulya Radar), Communication equip. (Radios, Switches, Gateways etc.) for Missile programs (QRSAM, Akash-NG, CIWS, etc.), Zoom Lens & Electro-Optics Sight Systems, AI based solutions and Traffic Management for Smart Cities, Railways (RTiS), Metro Railways etc.

  - Setting indigenization targets for every Business Unit & monitoring the progress. An indigenisation committee has been entrusted with this responsibility. Make-II process is being adapted to build an Indian eco-system. Some of the on-going efforts are as follows:

<table>
<thead>
<tr>
<th>Radars</th>
<th>Naval systems</th>
<th>Missile Systems</th>
<th>Comm.</th>
<th>EO &amp; Lasers</th>
<th>Encryption</th>
<th>Futuristic technologies</th>
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<td>LRDE</td>
<td>NSTL, NPOL</td>
<td>RCI, DRDL</td>
<td>DEAL, DRDL</td>
<td>IRDE</td>
<td>CAIR, SETS</td>
<td>IITs (Kanpur, Karagpur, Hyderabad, Roorkee), IIIT-Jabalpur, IISc</td>
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59
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<tr>
<th>SI#</th>
<th>Subsystem</th>
<th>Indian partner</th>
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<tr>
<td>1</td>
<td>5kVA UPS for ADTCR</td>
<td>3 MSMEs identified</td>
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<tr>
<td>2</td>
<td>Rugged 24” LED Display</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Line Interface and Detector Unit</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>OFC Cable Assy.</td>
<td>EoI Re issued as no response from MSMEs</td>
</tr>
<tr>
<td>5</td>
<td>Voltage Controlled SAW Oscillator</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Gyro sensor based True North Finder (TNF)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Power Supply 5V/60A</td>
<td>EoI being prepared – to be issued to MSMEs</td>
</tr>
<tr>
<td>8</td>
<td>VCOs (120MHz, 80MHz, 80MHz, 350MHz)</td>
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<tr>
<td>9</td>
<td>SFP Transceivers (9 variants)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Multi Output Power Supply</td>
<td>To be Identified</td>
</tr>
<tr>
<td>11</td>
<td>Electronically Tunable High Power Microwave Band Pass Filter</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Electronically Tunable Microwave Band Pass Filter</td>
<td>Multiple MSMEs identified</td>
</tr>
<tr>
<td>13</td>
<td>Microwave Low Noise Amplifier</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Dehydrator with SNMP</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Wormed Gear Box</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Rugged UPS</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Fibre Optic Gyro (single Axis)</td>
<td>Multiple MSMEs identified</td>
</tr>
<tr>
<td>18</td>
<td>Fibre Optic Gyro (+/-150deg/Sec)</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>8:1 High Power Combiner</td>
<td></td>
</tr>
</tbody>
</table>

- Strengthening the two Central Research Labs (CRL), BEL Software Technology Centre (BSTC) and Product Development & Innovation centre (PD&IC) for development of cutting edge futuristic and critical (cost extensive) technology Modules through:
<table>
<thead>
<tr>
<th>Current Manpower</th>
<th>253</th>
<th>187</th>
<th>249</th>
<th>225</th>
</tr>
</thead>
</table>

- **Empanelment of collaborative partners:**

<table>
<thead>
<tr>
<th>Service Providers</th>
<th>R&amp;D Consultants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Production</td>
</tr>
<tr>
<td>Empanelment in 2019-20</td>
<td>177</td>
</tr>
</tbody>
</table>

**BEML**: BEML Limited has its own world-class composite R&D establishment and is engaged in for Design & Development of products and continuous 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.

The Company launched “Make in India” Products 150T & 190T Dump Trucks, 180T Electrical / Hydraulic Excavators and 850HP Bulldozer successfully. These biggest electric drive dump trucks, excavator and bulldozer were designed and manufactured for the first time in India and are major import substitution products for the Mining sector. After successful trials, orders have been received for supply of 5 numbers of 180T Electrical Excavators, 7 numbers of for 150T and 8 numbers of 190T high end dumpers and are under execution. Additionally, Trial-cum sale order was received from M/s. CIL for 2 nos. of 850HP bulldozers and 1 no. of 180T Hydraulic excavator.

Indigenously Designed & Developed Arjun Armoured Repair & Recovery Vehicle in association with M/s. CVRDE, has undergone trials and orders are expected which will result in substantial FE savings for the Country.

Design & Development of Metro car for Kolkata Metro Rail Corporation Limited was successfully completed and all 14 train sets were delivered to the customer. Catenary Maintenance Vehicle (CMV) was successfully designed & developed and supplied to Delhi Metro Rail Corporation.
The Company has developed and supplied the country’s first unmanned train operated (driverless) metro rolling stock for supply to MRS1 project of Mumbai metro line 2A and line 7.

The Company is also working with industry partners to leverage technology for the benefit of customers such as introducing AI features in machines. During the year 2019-20, three following AI based products were developed:

✓ Mobile Medical Health Diagnostic System,
✓ Sleep / Fatigued operator alert system on Dump Trucks,
✓ Predictive maintenance of Mining equipment thru big data analytics and Machine learning algorithms.

Further, BEML Limited has identified the following AI projects for development:

✓ 360° Surrounding View Monitoring System: FY 2020-21 – Under progress
✓ Intelligent machine controlled Robotic arm for Weapon loading – Mounted Gun System: FY 2021-22 - Under progress
✓ Autonomus Dozer: FY 2021-22 - Under progress
✓ Autonomous All Terrain Surface Vehicle: FY 2022-23
✓ Autonomous All terrain Ground Vehicle with remote camera for reconnaissance: FY 2023-24.

**MIDHANI:** MIDHANI R&D efforts are focused in the area of:
- Alloy / Product Development
- Process Development / Improvement
- Technology collaboration

**MDL:** MDL is recognised as an In-House R&D unit by Department of Scientific and Industrial Research (DSIR). Details on MDL R&D is detailed below:

1. **In-house Activities:** MDL has identified the need to leverage the knowledge and expertise of people across the organization for technological excellence. Specialist Groups have been set up to enable personnel evolve best practices, improve processes and procedures based on experience and learning. The Specialists Groups functioning in warship design divisions are as follows:

   a) Propulsion System Integration(PSI): Propulsion Shafting Installation & Alignment Problems and resolution; ‘Shaft Designer’ software
b) Heating Ventilation and Air Conditioning (HVAC): Improvements in design

c) Finite Element based structural Analysis (FEA): Structural Analysis - Warship construction & block transportation / handling; equipment & seats strength analysis.


e) Ergonomics and Human Factors Engineering(HFE): Improved ergonomics and habitability; aesthetics and interior design on board P15A Ships

f) Noise and Vibration Assessment: Identification and implementation of noise and vibration reduction measures on-board ships

g) RCS management: Detailed study

h) Virtual Reality: VRL Utilization

i) Weight monitoring and control: Identification and implementation new Weight Monitoring techniques for warships

j) Standardization Group: Standardization of products / fittings

k) Development of Basic Design of Various ships like Offshore Patrol Vessel, Dredgers, Floating Dock, Missile Vessel, Launch Boats etc

2. R&D in collaboration with Universities/Start ups

a) MDL, in association with IIT Madras incubated start-ups is carrying out the development of three Artificial Intelligence (AI) projects as follows:

   - Development of Remotely Operated Vehicles.
   - Artificial intelligence (AI) enabled weld inspection with computerized radiography.
   - AI enabled robotic weld inspection using advanced phased array technique to replace manual radiography.

b) Following are other R&D projects in progress:

   - Ergonomic and Human Machine Interface (HMI) Enhancement in Machinery and Accommodation compartments for Naval ships in collaboration with NID Ahmedabad.
   - Aerodynamic simulation studies by Wind tunnel & Computational Fluid Dynamics with IISc, Bengaluru.
**GRSE:** GRSE is a DPSU Shipyard primarily engaged in construction of Warships for Indian Navy and Indian Coast Guard and manufacturing of Bailey Bridges of different types, Deck Machinery items and Marine Pumps. The Diesel Engine Plant at Ranchi is for the Assembly, Testing and servicing of Marine Diesel Engines. All R&D activities of this Shipyard are associated with these core activities only. Hence this recommendation is not applicable for the Shipyard.

**GSL:**

(a) Research & Development is a major thrust area and at present GSL has a well-established R&D centre which has been recognized and registered as in-house R&D unit by the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, GoI. GSL is the first shipyard to have this unique distinction of having this recognition. The major objective of the R&D facility at GSL is to develop products to support the Indian Defence Forces and friendly Indian Ocean Rim countries. In line with the above, GSL’s major area of R&D is in developing products in the area of ocean surveillance, patrolling and vessels required for the security of the EEZ of India and Indian Ocean Rim countries.

(b) Over the years, GSL has developed design of various types of vessel which are constructed and currently in service. The design and development of these vessels are the outcome of an intensive R&D activity undertaken by GSL over the years. Following vessels are designed in house and constructed by GSL:

a. Coastguard Offshore Patrol Vessels,
b. Naval Offshore Patrol Vessels,
c. Advance Offshore Patrol Vessels for export
d. Fast Patrol Vessels,
e. Export class Fast Patrol Vessels

(c) GSL also invests time and manpower into developing designs anticipating the market needs. Following in-house designs were also undertaken successfully:

(i) Design and development of Pollution Control Vessels
(ii) Design and development of Landing Ship Tank
(iii) Design and development of Cadet Training Ship
(iv) Design and development of Next Generation Offshore Patrol Vessel
(v) Design and development of Coastal Patrol Vessel
(vi) Design and development of Next Generation Missile Vessel
(vii) Design and development of Multi-Purpose Vessel
(viii) Design and development of Survey Training Ship
(ix) Development of Hull form and General arrangement for 60 meter Patrol Vessel for Indian Ocean Rim Countries

(d) GSL has tied up with IIT Goa for various CFD Design and Development analysis.
(e) Continuous efforts will be made to enhance R&D capabilities.

**HSL:** There is no exclusive R&D unit in the Shipyard. However, 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 major R&D projects which were already completed are as below:
  - (a) Innovative Installation of Diffraction Fence on OSS
  - (b) Innovative Method for Installing HT Cables
  - (c) CFD for Air Intake System
  - (d) Design of 10 T Bollard Pull Tug for Indian Navy
  - (e) Design of Berthing Pontoon for DGNP (V)

- Detailed design of following projects were undertaken in 2019:
  - (a) Four 50 T tugs for Indian Navy
  - (b) Three flap gates for Indian Navy

- In-house designs of following ships have been undertaken in the year 2019, for which bid designs have been submitted:
  - (a) Two Pollution Control Vessels for Indian Coast Guard
  - (b) Eight Fast Patrol Vessels for Indian Cost Guard
  - (c) One 500 passenger vessel for SCI

- Functional and details design of Diving Support Vessels is carried out in house by external agency.

- In addition to the above designs, in-house design capabilities are being enhanced by undertaking design of a wide variety of ships such as Multipurpose Cargo Vessels for SCI, Offshore Patrol Vessels for Indian Navy etc, so as to progress towards the aim of Design department of the Shipyard becoming a ‘Centre of Excellence’. The R&D Expenditure as a % of Revenue in respect of HSL during the last three years is tabulated below:-

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D expenditure</td>
<td>Rs Cr</td>
<td>5.57</td>
<td>4.38</td>
<td>4.75</td>
</tr>
<tr>
<td>VoP</td>
<td>Rs Cr</td>
<td>644.78</td>
<td>594.91</td>
<td>495.00</td>
</tr>
<tr>
<td>R&amp;D expenditure as % VoP</td>
<td>%</td>
<td>0.86</td>
<td>0.73</td>
<td>0.96</td>
</tr>
</tbody>
</table>
DEFENCE PLANNING

FIVE YEAR DEFENCE PLANS

Recommendation No. 26-28

Recommendation No. 26

The Committee note that the Defence Five Year Plans are formulated to elaborate the necessary steps to maintain and augment Defence capabilities in line with the Raksha Mantri’s Operational Directive, the Long Term Perspective Planning and the current threat perception. These plans help to estimate the outlay required to achieve the planned objective. The Ministry also stated that under these Five Year Plans operational activities are done within the available budget allocations. For optimal and full utilization of allocated funds the schemes are reprioritized to ensure that urgent and critical capabilities are acquired without any compromise to operational preparedness of the Defence Forces.

Recommendation No. 27

The Committee in their earlier Reports have been recommending the Ministry to adopt measures for fool proof budgetary planning and implementation. The Committee are surprised to know that the 12th Plan was approved by the Raksha Mantri but the Ministry of Finance, however, did not approve the Plan. While formulating the guidelines for the 13th Defence Plan it was decided that the Plan may be sent to Ministry of Finance only for information and not for its approval. The Ministry of Finance will be kept in loop about the requirements of the Defence Forces in the coming years. The Committee also note from the replies submitted that non approval of the Defence Plan does not act as hindrance in implementation of Defence projects. Activities planned are likely to proceed according to available annual budget allocations and the Defence Plan serves only as a guide for formulating annual budgetary projections even without the formal approval of the Ministry of Finance.

Recommendation No. 28

In the 12th (2012-17) plan, the Ministry was able to spend Rs. 10,55,763.75 crore out of Rs. 10,95,262.55 crore allocated. However, the Committee note that in 2017-18, the Ministry was earmarked Rs. 262992.54 crore and the amount spent was Rs. 2,72,559.83 crore. Similarly in 2018-19, Ministry was granted Rs.2,82,078.02 crore but Rs. 2,87,668.65 crore were utilized; in 2019-20, Ministry was allocated Rs. 3,16,296.07
crore and the expenditure was Rs. 3,18,664.58 crore. While gleaning through the data supplied, the Committee note that in the past few years Ministry was able to spend more than the allocated amount. Therefore, the Committee desire that at the first place, the Ministry of Finance should desist from any cut in the financial allocations in annual plans for Ministry of Defence, especially when the Ministry of Defence is able to absorb entire allocated amount. The Committee further recommend that the Ministry of Defence should make well calculated and enhanced demand for additional allocation at the time of supplementary grants, since they have an obligation to fulfil.

**Reply of the Government**

The recommendation of the Committee are noted for compliance. The Committee may be assured that additional allocations sought by the Services will be projected at supplementary/RE stages of the current fiscal. It is assured that the adequate funds would be made available for meeting the liabilities.

**Recommendation No. 29**

The Committee note that in 2020-21 the Ministry was able to utilize Rs.2,33,176.70 crore (upto Dec. 2020). Since the Ministry had last quarter to utilize the rest of the amount and there was no cap on expenditure in last quarter of the year due to Covid-19 pandemic situation, the Committee would like to be apprised of the figures of final expenditure in 2020-21. The Committee would also like to know about the constraints in spending the full allocated funds, if any, at the time of furnishing Action Taken Replies.

**Reply of the Government**

In FY 2020-21, expenditure of Rs. 3,40,147.41 Crore (i.e. 98.93% of RE 20-21) upto March (Final-as on 19.05.2021) against RE 20-21 allocations of Rs. 3,43,822 Crore. The Ministry is able to expend almost entire allocations, therefore, issue of constraints in expending allocated funds does not arise.

**MARRIED ACCOMMODATION PROJECT (MAP)**

**Recommendation No. 30**

The Committee note that Directorate General of Married Accommodation Project (DG MAP) was raised by Government of India under the aegis of Engineer in Chief to construct married accommodation for the three services, with the aim of eradicating the deficiency of married accommodation for service personnel. The MAP was setup to fulfill the promise made to the Armed Forces by the Government of India. The total
deficiency of two lakh dwelling units have been slated for construction in four phases. After construction of dwelling units over the time period, at present, there is a deficiency of 71,102 in all (70,432 dwelling units in respect of Army and 670 in respect of Air Force).

Reply of the Government

The total deficiency of two lakh dwelling units had earlier been slated for construction in four phases. However, the third and fourth phases of MAP were combined in order to complete the entire requirement in three phases. Accordingly, planning of MAP Ph III was sanctioned for 71,102 Dwelling Units. Due to non availability of funds it was decided to undertake construction of Ph III in two parts viz 24,592 Dwelling Units in MAP Ph-III (A) and balance in MAP Ph-III (B). Planning of MAP Ph III commenced at 13 locations (08 packages) and the DPR for the same is in advanced stages of completion. However, recently, an In-Principle decision has been taken for foreclosure of MAP Ph-III and to execute the remaining works through the AMWP route.

Recommendation No. 31

The committee note that due to reduced budgetary allocaton many constraints are being faced by the MAP i.e. Low satisfaction level, delay in commencement of MAP Ph III, delay in execution of MAP Ph III, cost escalation of MAP Ph III etc. The committee were informed that MAP Phase-III was planned for construction 71,102 DUs at an anticipated cost of Rs 23,279.70 crore. During the 56 and 57 Apex Steering Committee Meetings Army authorities have conveyed difficulty in providing budgetary support for MAP Ph-III. Consequently MAP was allotted Rs 344.72 crore during the year 2020-21 against a projection of Rs 532 crore. For the year 2021-22, an allocation of Rs 551 crore was sought for MAP in 2021-22. However, due to the delays in construction due to budgetary constraints, it was decided by the Department of Military Affairs that maximum married Dwelling Units would be constructed through Annual Major Works Programme (AMWP) route. Accordingly it was proposed to process revised CCS Note for foreclosure of MAP Phase-III.

Reply of the Government

71,102 Dwelling Units are to be constructed in MAP Ph III, where Army was the major stake holder as 70,432 Dwelling Units were to be constructed for Army. Due to re-balancing of funds, it was decided by Army to restrict the planning for MAP Phase III to 24,592 Dwelling Units and Rs 100 Crs allotted for the preparation of DPRs, which are in advance stage of completion. However, an in-principle decision has been taken recently for foreclosure of MAP Phase III to execute the remaining works through the AMWP route.
CHAPTER II (B)

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

Recommendation No. 21

The Committee have been apprised that as on date, a total of 56 Defence offset contracts have been signed in MoD. The total offset obligations are estimated at approx US $ 13.03 billion to be discharged over a period from 2008-2027. Out of the total contracted obligations US$ 3.57 billion has been discharged by the vendors, of which US $ 1.93 billion has been accepted in audit and the balance claims are under clarification/examination. The Committee are of the view that the Ministry of Defence would take appropriate measures for clearing balance claims which are under clarification/examination which would result in further strengthening of Defence Industrial Base.

Reply of the Government

As per the updated status, till April, 2021, a total of 56 Defence offset contracts have been signed in MoD. The total offset obligations are estimated at approximately US $ 13.03 billion to be discharged over a period from 2008-2027. Out of the total contracted obligations, US $3.67 billion has been discharged by the vendors, of which US $2.16 billion has been accepted in audit and the balance claims are under clarification/ examination. With the introduction of end-to-end online submission and verification of offset claims through the offset portal, the process of audit and disposal of offset claims has become more transparent, efficient and accountable.

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

Recommendation No. 32

The Committee feel that budget constraints are always there in capital intensive projects like MAP, and the Committee appreciate the decision of the Ministry to complet the targeted number of dwelling units through AMWP. At this stage the Committee only desire the Ministry to get this proposal accepted at the earliest and start with the construction of Dwelling Units as soon as possible so that it does not get delayed further.
Reply of the Government

Against total requirement of 1,98,881 Dwelling Units 1,17,118 Dwelling Units have already been completed under Phase-I and Phase-II. As of now 10,661 of Phase-II are in various stages of planning and execution. The Phase-II is likely to be completed by Dec 2023. Rs 100 crore were allotted for preparation of DPRs for 24,592 Dwelling Units of Phase-III which are at advance stage of completion. Now, as per decision taken in the DMA, the Draft CCS Note for foreclosure of MAP Phase III and to execute the remaining works through the AMWP route is under preparation.

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

Recommendation No. 33

During the course of evidence, when the deliberations on the proposal or plan to increase MAP in Jammu and Kashmir was taking place, it was informed that as peace is returning to the Kashmir Valley, there will be a requirement of putting more accommodation in the valley. The Committee, welcome the idea of increasing the number of dwelling units in Kashmir Valley and accordingly recommend that emphasis should be given on completing required number of Dwelling Units (DUs) at the earliest so that our Armed Forces would be in a better state of mind to serve the nation.

Reply of the Government

The construction of Dwelling Units in Jammu & Kashmir as per the approved re-distribution and re-location plan was considered to be undertaken in MAP Phase III, which would now be executed through the AMWP route, once the CCS approval is received for foreclosure of MAP Ph-III. The additional requirement of Dwelling Units at Jammu and Kashmir will also be taken into consideration while finalising the AMWP.

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

OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES.

-NIL-
CHAPTER IV

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

Committed Liabilities and New Schemes

Recommendation No. 10

The Committee learn that at present, there is no separate allocation of funds for Committed Liabilities and New Schemes under Defence Services Estimates and the funds for it are allocated under Capital Acquisition (Modernisation) Head. The Committee observe that the allocation in the 2021-22 for Army is Rs. 30,636.90 crore against projection of Rs. 39,977.00 crore. For Navy (excluding Joint Staff) the allocation is Rs. 31,031.02 crore vis-à-vis projection of Rs. 65,888.96 crore which is less than the half of the projected amount. The allocation for Air Force stands at Rs. 49,320.77 crore against the projection of Rs. 72,180.06 crore. In addition it is ensured by the Ministry that urgent and critical capabilities are acquired without any compromise to the operational preparedness of the Defence Services. The Committee find it contradictory in comparison to amount of funds actually allocated under BE-2021-22 for the three services especially Navy being a capital intensive force. Ministry had sought additional funds of Rs. 61,198.12 crore at RE stage in 2021-22 under Modernization Head but only Rs. 24,272.50 crore were provided to them. Considering this grim situation towards allocation in Capital Acquisition Fund, the Committee in their 7th Report had recommended the Ministry of Defence to create a dedicated fund for Committed Liabilities and New Schemes. As no progress has been observed by the Committee in this regards, the Committee again urge the Ministry to create a separate dedicated Head for Committed Liabilities and New Schemes from the next Budget onwards, so that there are no difficulties faced in matching the deadlines in the payment towards already committed purchases and latest weaponry could be procured under New Schemes.

Reply of the Government

The outstanding contractual commitments which are overdue or commitments which are likely to arise during a period on account of completion in contractual milestone constitute committed liabilities over that period. This amount of committed liabilities is dynamic in nature and depends on contracts concluded at a particular point of time, contractual milestones due to be fulfilled over a defined period and the associated slippages, if any. New Schemes constitute new projects/proposals that are
at various stages of procurement/approval and are likely to be fructified over a defined period (usually a financial year). The forecasted amount for new schemes also keeps on changing with reference to their fructification/finalization. On conclusion of contract with respect to a “new scheme” the same becomes a committed liabilities and payments have to be scheduled as per fulfilment of contractual milestones. Thus, the Capital Acquisition (modernization) segment of the Capital Budget comprises of both committed liabilities and new schemes.

It is submitted that in the Defence Services Estimates, the allocation under Capital Acquisition (modernization) is made through specific/separate Minor Heads which caters to both the Committed Liabilities and New Schemes.

[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

Additional Allocation

Recommendation No. 5:

The Committee are satisfied to find that the Ministry of Defence has put forth the Demand of Rs. 9,286 crore under Revenue Head (Non-Salary) and Rs. 20,776 crore under Capital Head as additional funds during the year 2020-21. The Committee are of the opinion that first and foremost priority should be given to the preparedness of Defence Forces and the Ministry should ensure that these additional allocation of funds should be utilized for critical projects and operational activities of the three services. The Committee also desire the Ministry to take steps for timely expenditure of the allocated funds in the first two quarters itself so that requirement of additional funds is assessed timely and get approved from the Ministry of Finance at Supplementary Grants stage.

Reply of the Government has not been received with regard to Recommendation No. 5.

Non Lapsable Defence Modernization Fund – Defence Renewal Fund

Recommendation No. 11

The Committee in their various previous reports have recommended making Capital Budget ‘Non-lapsable’ and ‘Roll-on’ in nature. The Ministry was consequently asked to convey the current status of the same. The Committee were apprised during the oral evidence that a draft Cabinet note for Non-Lapsable Defence Modernisation Fund is under consideration. The Committee observe that out of the total budgetary allocation of Rs. 3,43,822.00 in 2020-21 only Rs. 2,33,176.70 have been utilized by the Ministry upto December 2020. As there is around Rs. 110,645.3 crore left unutilized which is to be spent in the three months of this F.Y. 2020-21, the Committee recommend the Ministry to expedite the constitution of a Non-Lapsable Defence Modernisation Fund – Defence Renewal Fund, which may be meant exclusively for the procurement of critical defence assets at critical times. As the draft Cabinet note for constituting a Non-Lapsable Modernisation Fund is under consideration, the Committee advice the Ministry that approval may be accorded to fructify its creation at the earliest
so that procurement can be done unhampered without pursuing for funds to receive at Supplementary or Additional Grants stages.

Reply of the Government

Proposal for Creation of Non-Lapsable Defence Modernization Fund is under examination.

New Delhi;
17 November, 2021
26 Kartika, 1943 (Saka)

JUAL ORAM
Chairperson
Standing Committee on Defence
APPENDIX – I

STANDING COMMITTEE ON DEFENCE (2021-22)

MINUTES OF THE SECOND SITTING OF THE STANDING COMMITTEE ON DEFENCE (2021-22)

The Committee sat on Wednesday, the 17th November, 2021 from 1500 hrs. to 1545 hrs. in Committee Room ‘B’, Parliament House Annexe, New Delhi.

PRESENT

Shri Jual Oram - Chairperson

MEMBERS

Lok Sabha

2 Kunwar Danish Ali
3 Shri D.V. Sadananda Gowda
4 Shri Annasaheb Shankar Jolle
5 Choudhary Mehboob Ali Kaiser
6 Shri Rattan Lal Kataria
7 Shri Uttam Kumar Reddy Nalamada
8 Shri Mahabali Singh

Rajya Sabha

9 Dr. Ashok Bajpai
10 Dr. Sudhanshu Trivedi
11 Lt. Gen. (Dr.) D.P. Vats (Retd.)
12 Shri K.C. Venugopal

SECRETARIAT

1. Dr. Sanjeev Sharma - Director
2. 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 Nineteenth Report (Seventeenth Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2021-22 on ‘General Defence Budget, Border Roads Organisation, Indian Coast Guard, Defence Estates Organisation, Defence Public Sector Undertakings, Canteen Stores Department, Welfare of Ex-Servicemen and Defence Pensions (Demand Nos. 18 and 21)’;

ii. Action Taken by the Government on the Observations/Recommendations contained in the Twentieth Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2021-22 on ‘Army, Navy, Air Force, Joint Staff, Military Engineer Services, Ex-Servicemen Contributory Health Scheme and Sainik Schools (Demand Nos. 19 and 20)’; and

iii. Action Taken by the Government on the Observations/Recommendations contained in the Twenty-first Report (17th Lok Sabha) on Demands for Grants of the Ministry of Defence for the year 2021-22 on ‘Capital Outlay on Defence Services, Procurement Policy, Defence Planning and Married Accommodation Project (Demand No. 20)’.

3. After some deliberations, the Committee adopted the above reports barring a few amendments in draft Report mentioned at Sl. No. (ii) above.

4. ********

5. 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. *****

The Committee then adjourned.

***** Does not pertain to the Report.
APPENDIX II

ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS / RECOMMENDATIONS CONTAINED IN THE TWENTY-FIRST REPORT (17TH LOK SABHA) ON ‘DEMANDS FOR GRANTS FOR THE YEAR 2021-22 ON CAPITAL OUTLAY ON DEFENCE SERVICES, PROCUREMENT POLICY, DEFENCE PLANNING AND MARRIED ACCOMMODATION PROJECT (DEMAND NO. 20)’

1. Total number of Observations/Recommendations: 33

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

   Recommendation Nos. 1,2,3,4,6,7,8,9,12,13,14,15,16,17,18,19,20,22,23,24,25,26,27,28,29,30 and 31

   Total : 27
   Percentage: 82%

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

   Recommendation Nos. 21, 32 and 33

   Total : 3
   Percentage: 9%

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 No. 10

   Total : 1
   Percentage: 3%

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

   Recommendation Nos. 5 and 11

   Total : 2
   Percentage: 6%