

NINTH REPORT
STANDING COMMITTEE ON DEFENCE
(2005-06)

(FOURTEENTH LOK SABHA)

MINISTRY OF DEFENCE

DEFENCE PUBLIC SECTOR UNDERTAKINGS

*Presented to Lok Sabha on 20.3.2006
Laid in Rajya Sabha on 20.3.2006*



LOK SABHA SECRETARIAT
NEW DELHI

March, 2006/Phalguna, 1927 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE
ON DEFENCE (2005-06)

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** Nominated *w.e.f.* 9.12.2005.

*** Ceased to be a Member of the Committee *w.e.f.* 22.12.2005.

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* Ceased to be a Member of the Committee *w.e.f.* 18.8.2005.

**** Ceased to be a Member of the Committee *w.e.f.* 29.1.2006.

***** Ceased to be a Member of the Committee *w.e.f.* 8.3.2006.

***** Nominated *w.e.f.* 8.3.2006.

PREFACE

I, the Chairman, Standing Committee on Defence (2005-06) having been authorised by the Committee to submit the Report on their behalf, present this Ninth Report on the subject 'Defence Public Sector Undertakings'.

2. The subject was selected for examination by the Standing Committee on Defence (2004-05). As the examination of the subject remained inconclusive, it was re-selected by the Standing Committee on Defence for examination during the year 2005-06.

3. The Committee during the examination of the subject took oral evidences of representatives of Ministry of Defence including the Chairman and Managing Directors of 8 DPSUs *viz.* Hindustan Aeronautics Limited, Bharat Earth Movers Limited, Bharat Electronics Limited, Bharat Dynamics Limited, Mishra Dhatu Nigam Limited, Mazagon Dock Limited, Goa Shipyard Limited and Garden Reach Shipbuilders and Engineers Limited on 24.05.05, 02.06.05, 04.07.05 and 14.07.05. The Committee also heard views of representatives of Confederation of Indian Industry on 04.07.05. The Committee also undertook an on-the-spot study visit to some Defence Public Sector Undertakings at Hyderabad, Bangalore, Mumbai, Goa and Nasik during September-October 2005 for an in-depth analysis of the subject matter.

4. Based on the background note, written replies to the list of points furnished by the Ministry of Defence on the subject, briefing/ oral evidence tendered by the representatives of the Ministry and the DPSUs and CII, the draft report was finalized. The Committee adopted the draft report at their sitting held on 16.02.2006.

5. The Committee in their report after detailed examination of DPSUs have particularly emphasized on points namely financial autonomy to DPSUs to raise resources from market, in house R&D centers in DPSUs, clear cut export policy for defence products. The Committee have to also stressed that DPSUs should focus only on defence sector and slowly get out of non-defence production.

6. The Committee wish to express their thanks to the representatives of the Ministry of Defence for appearing before the Committee for evidence and for furnishing the valuable material and information in

a very short span of time which the Committee desired in connection with the examination of the subject. The Committee are also thankful to the representatives of Confederation of Indian Industry and Chairmen and Managing Directors of Defence Public Sector Undertakings for appearing before the Committee and submitting useful information.

7. For facility of reference and convenience, the observations/recommendations of the Committee have been printed in thick type in the body of the Report.

NEW DELHI;
13 March, 2006

22 Phalguna, 1927 (Saka)

BALASAHEB VIKHE PATIL,
Chairman,
Standing Committee on Defence.

9

**STANDING COMMITTEE
ON DEFENCE
(2005-06)**

FOURTEENTH LOK SABHA

MINISTRY OF DEFENCE

DEFENCE PUBLIC SECTOR UNDERTAKINGS

NINTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

March, 2006/Phalguna, 1927 (Saka)

CHAPTER I

INTRODUCTION

1.1 India has a large, established and diverse defence industry restricted mainly to public sector. The Department of Defence Production (DDP) of the Ministry of Defence which oversees the defence production units has a substantial infrastructure developed over the years, consisting of 39 Ordnance Factories and 8 Defence Public Sector Undertakings. It also draws upon supplies from the Indian civil/private sector wherever feasible and forms the backbone of the country's defence production. Its main objectives are:

- (a) Synergy amongst the Defence Production Units, DRDEs, Services and Private Industry for mutual sharing of infrastructure and technologies to harness the best out of the existing capacities and also to shorten the time period for the development of new products and induction thereof in the Defence Forces.
- (b) Modernisation of the existing infrastructure with the objective of improving productivity and developing versatility for diverse product profile.
- (c) Redefine the role of Quality Assurance, Standardisation.
- (d) Increased role of private enterprise in defence production.
- (e) Initiatives for enhancing exports of products and services.
- (f) Restructuring of Ordnance Factories and Defence PSUs so as to respond faster to the emerging needs.
- (g) Self-certification.

The following eight DPSUs under the Department of Defence Production cater to the requirements of Defence forces:

- (i) Hindustan Aeronautics Limited (HAL)
- (ii) Bharat Electronics Limited (BEL)
- (iii) Bharat Earth Movers Limited (BEML)
- (iv) Mazagon Dock Limited (MDL)

- (v) Goa Shipyard Limited (GSL)
- (vi) Garden Reach Shipbuilders & Engineers Ltd. (GRSE)
- (vii) Bharat Dynamics Limited (BDL)
- (viii) Mishra Dhatu Nigam Limited (MIDHANI).

The capabilities of Defence Public Sector Undertakings include:

- Design of aerospace, maritime and land systems.
- CAD/CAM facilities for manufacture of high-technology products.
- Modern project management tools—ERP systems.
- Quality circles: ISO certification obtained.
- Reliable maintenance, repair and overhaul, facilities.
- Facilities for manufacture of strategic materials.
- Large pool of skilled scientists, engineers and technicians.

1.2 The three public sector undertakings namely Mazagon Dock Limited (MDL), Goa Shipyard Limited (GSL) and Garden Reach Shipbuilders and Engineers Limited (GRSE) are engaged in shipbuilding. Warship construction by the shipyards is governed by the Indigenous warship Building procedure which was promulgated on 18th March, 2004. As per procedure the selection of the yard for a major project is made by Department of Defence Production keeping in mind the capability of the yard for a particular project and available capacity. It is attempted to maximize the synergy amongst the defence shipyards and avoid competition amongst them. However, for minor vessels the yards compete amongst themselves as well as with the private sector depending on capacity available. The Ministry of Defence has stated that it is committed to building up indigenous warship building capability and therefore has made efforts for optimum utilization of each ship building DPSU by placing orders on the DPSU based on their capability, facilities available, past experience of building, which include the size and type of ship constructed by the shipyard.

1.3 According to the Ministry, consolidated value of production in the year 2003-04 for all DPSUs was Rs. 10078.22 crore and provisional figure for the year 2004-05 is Rs. 12185.56 crore. The turnover for DPSUs in the year 2003-04 was Rs. 9892.73 crore and provisional figure for turnover for the year 2004-05 is Rs. 11120.38 crore. The total sales

of Defence Public Sector Undertakings is on the rise from Rs. 7205 crore in 1998-99 to Rs. 11120 crore in 2004-05.

1.4 The Standing Committee on Defence, while examining the above subject, visited some DPSUs namely, HAL, BDL, GSL, MDL and BEML and held informal discussions with their other representatives in order to make appraisal of the performance of the eight Defence Public Sector Undertakings (DPSUs) of the Ministry of Defence and have given certain suggestions in the form of recommendations to further improve the working of the DPSUs. Keeping in view the increasing capability and capacity of private sector, the Committee also heard the views of representatives of Confederation of Indian Industry to find out as to how they can more effectively participate and contribute in defence production. Recommendations of the Committee on each DPSU and private participation in Defence production are given in the succeeding chapters/paragraphs.

1.5 The Committee note that the Ministry of Defence has eight Public Sector Undertakings (DPSUs) which cater to the basic strategic requirements of Defence Forces. The Committee also note that defence production is a highly sophisticated sector, which requires state-of-the-art technology. A major challenge before these DPSUs is therefore to constantly upgrade their technology and products so that their products may be of world standards and may successfully compete in the international market.

1.6 To achieve the above objectives, DPSUs need sufficient resources/funds to undertake modernization of their plants and make investment in R&D, manpower training etc. Therefore, the Committee are of the view that DPSUs should be given more financial autonomy and allowed to raise resources through market-borrowing by way of equity/bonds/loan from public. The Committee recommend that the Government should permit DPSUs to utilize a certain percentage of the money received from market borrowing for modernization purposes. It will ensure accountability and also increase the resource bases of the organizations. It will also make them self-sufficient and reduce their dependency on government funds. The DPSUs should also be given more autonomy in decision making and in matters like entering into joint venture/co-development and co-production agreements with foreign countries. The Committee further desire that DPSUs should appoint a Committee of experts including some outside experts also which may, from time to time, give well-considered advice to improve their products and bring efficiency in the work.

1.7 The Committee feel that in R&D matters DPSUs should not depend only on DRDO/foreign technology. They are of the view that in the fast changing technology regime, there is an imperative need for in-house R&D centres in each of DPSUs so that they may also themselves undertake technology upgradation. For this purpose, a minimum percentage of the profit earned by the DPSUs should be allowed to be utilized by them for their R&D centres. This will also enable the DPSUs to avail benefit of the inbuilt provision in the income tax law whereby they can seek admissible exemption in the income tax for investments made in R&D. In this way DPSUs will be able to spend more money on R&D, thereby taking the country further on the path of self reliance in defence technology. The Committee also feel that DPSUs should maintain effective coordination among themselves in the R&D field to have optimum results therefrom. The Committee desire that in all DRDO projects, users and DPSUs should always be involved at the time of conceptualisation of the project.

1.8 The Committee recommend that Government should formulate a well planned export policy for defence products in consultation with DPSUs and outside experts in the field. A strategy should be evolved to give export orientation to the defence products and market them effectively in the international market. In this connection, the Committee also desire that, like in many countries, matters relating to defence exports should be actively taken up with foreign countries at Government level. The Committee also desire that Government should appoint authorized agents to promote defence exports in international market.

1.9 The Committee note that an offset clause has been introduced in new Defence Procurement Policy-2005. Government should give necessary freedom to the defence establishments so that they may utilise this clause in the best possible and effective manner to ensure maximum benefit for the country. Besides, for more effective utilization of the offset clause, defence PSUs should be given autonomy to enter into MOUs with other DPSUs, ordnance factories, private sector and foreign countries.

1.10 The Committee emphasize that defence products manufactured by DPSUs should be of top quality, at par with the international standards. The Committee also desire that Government should formulate a policy for all defence units including DPSUs to allow them to move towards self certification of all their defence products. It will increase the accountability/responsibility of DPSUs/

Ordnance Factories/Private Sector in maintaining the quality of the products and will go a long way in establishing their creditability and quality assurance with the defence services.

1.11 The Committee note that DPSUs, in addition to defence equipment, are also making hi tech equipment for non-defence sector, and thereby diluting their status and character as DPSUs. The Committee, therefore, desire that DPSUs should slowly get rid of the non-defence sector items and focus only on defence requirements. The Committee further stress that only after meeting their prime responsibility towards defence sector, the DPSUs may use their spare capacity if any, for other sectors for generating additional revenue.

1.12 The Committee desire that the Government while granting the status of Mini Ratna, should not follow the criteria of Independent Directors on the Company Board, in the case of defence establishment. The Committee are of the strong view that for this strategic industry, Government should evolve different criteria for granting the status of Mini Ratna.

1.13 The Committee note that there are three DPSUs namely Mazagaon Dock Limited (MDL), Goa Shipyard Limited (GSL) and Garden Reach Shipbuilders and Engineers Limited (GRSE) engaged in shipbuilding. The Committee desire that those DPSUs which are producing the same or similar kind of products or supplementary to each other should be restructured/integrated in order to synergise their resources. Such an integration/restructuring will enormously help in modernisation of the existing facilities, besides resulting in optimum utilisation of Human Resource and production capacity. The Committee also desire that during the process of restructuring of DPSUs, the interests of the labourers and workmen must be taken in account by the Government.

CHAPTER II

HINDUSTAN AERONAUTICS LIMITED

2.1 Hindustan Aeronautics Limited was formed in October, 1964 by merger of Hindustan Aircraft Limited and Aeronautics India Limited. The Company has 16 divisions located in six States. All the divisions of HAL have ISO 9001-2000 accreditations and 12 divisions have also obtained ISO 14001-1996 Environment Management System certification. HAL is a MoU signing company and is declared as Mini Ratna (Category I) Company.

2.2 Giving the product profile of HAL, the Ministry stated:—

“Since its inception, Hindustan Aeronautics Limited (HAL) has evolved into a large Aeronautics Complex. It has built up comprehensive skills in Design, Manufacture and Overhaul of Fighters, Trainers, Helicopters, Transport Aircraft, Engines, avionics and System Equipment. Its product tract record consists of 11 types of Aircraft from in-house R&D and 13 types by licence production inclusive of 8 types of Aero Engines and over 1000 items of Aircraft System Equipment (Avionics, Mechanical, Electrical). HAL has produced 3344 aircraft, 3538 aero engines and overhauled 7960 aircraft & 26803 engines by 2003-04 besides related systems and their life time support. The company has the requisite core competence base with demonstrated potential to become a global player”

2.3 As regards the customer base the Ministry informed that:—

“HAL’s major supplies/services are to IAF, Navy, Army, Coast Guard and BSF. As a spin-off, Transport aircraft and Helicopters have been supplied to Airlines as well as State Governments. The company has also achieved a foothold in export to more than 20 countries, having demonstrated its quality and price competitiveness. HAL also supports fully the Space Vehicle programmes of ISRO. It has diversified into the fields of Industrial & Marine Gas Turbine business and Real-time software business.”

2.4 In their examination of PSUs, the Committee visited HAL units in Bangalore and Nasik and interacted with the CMD and other officials of HAL. The Committee also visited various shops of HAL units.

Capacity Utilisation

The Committee enquired about the capacity utilisation in HAL, the Ministry stated:—

“The manpower capacity utilisation in relation to the available capacity is indicated below as percentage value:—

	2002-03	2003-04	2004-05
Aircraft	87%	92%	97%
Engine	99%	98%	97%
Avionics/ Accessories	90%	93%	93%
Total HAL	91%	94%	96%

It was further informed that HAL has a satisfactory order book and is getting sufficient orders.

On a query of the Committee, the Ministry informed that following 9 types of Aircrafts are presently under production at HAL:

- (1) Advanced Light Helicopter (Dhruv)
- (2) TEJAS-LCA
- (3) SU-30 MKI
- (4) Jaguar Strike
- (5) Dornier-228
- (6) Advanced Jet Trainer (AJT-Hawk) facilities

Financial Performance

2.5 The Ministry has stated that in terms of financial performance, the company has been achieving a steady growth in sales, value added, profit, dividend paid and internal generation of resources. Details for past 3 years are given as below:—

Particulars	2001-2002		2002-2003		2003-2004	
	MoU	Actuals	MoU	Actuals	MoU	Actuals
Turnover/sales	2556.00	2774.81	2810.00	3120.42	3230.00	3799.78
Value Added	1620.05	1707.59	1750.88	1870.33	1760.28	2082.79
Profit	303.36	373.48	297.76	433.37	395.34	599.42
Dividend Paid	29.40	68.96*	45.94	87.98*	62.44	92.46*
Internal Generation of Resources	395.50	474.21	374.84	537.67	507.34	756.31

2.6 During the year 2003-04, the sales figure of the company stood at Rs. 3799.78 crores and value of exports at Rs. 215.34 crores. The company paid a dividend of Rs. 81.96 crores for the year 2003-04.

Perspective Plan

2.7 As regard perspective plan of HAL, the Ministry in a written note to the Committee has interalia stated:—

“HAL has prepared a Perspective Plan (2003-2012) in coordination with Service Headquarters. The plan incorporates the Manufacturing, Repair & Overhaul and Design and Development projects. The Plan covers the projected task, manpower plan, cost reduction plan, research & development and indigenisation plans, export plans, quality plans and financial projections. The projections made in the Plan up to 2011-12 are derived from available firm orders, Letter of Intents and anticipated projects based on indications from Defence Services. The document has been prepared to bring out the objectives, goals & strategies and document has been prepared to bring out the objectives, goals & strategies and also to provide guidelines and milestones for future Plans of the Company, including resource needs in terms of manpower, technology and finance.

The Perspective Plan of HAL is derived from its long term mission of appropriate enlargement of its product range, expansion into production of civil aircraft and system equipment business and a new thrust on exports. The plan has also brought out the actions needed to be taken in the context of the decisions already taken, as well as decisions that are expected to be taken by the Government.”

Current Status of Major Projects

2.8 When asked about the major projects being executed by HAL on priority basis and whether they are on schedule, the Ministry has furnished that the following projects are in schedule/revised schedule:—

- (i) ALH (Dhruv) Development & Production
- (ii) Manufacture of SU-30 MKI Aircraft
- (iii) Jaguar Strike Aircraft (20 Nos)
- (iv) MiG-27M Upgrade
- (v) DORNIER (DO-228) for NAVY

- (vi) HAWK-AJT
- (vii) Light Combat Aircraft (LCA)-TEJAS
- (viii) Intermediate Jet Trainer (IJT)
- (ix) PTA (Lakshya)

Research and Development

2.9 On being asked about major R&D projects being undertaken by HAL, the Ministry informed that Intermediate Jet Trainer, Advanced, Light Helicopter, Jaguar Navvass Upgrade, MiG 27 M Upgrade, Light Combat Helicopter (Planned), Advanced Jet Trainer (indigenous) (Planned) and HPT-32 replacement (Planned) are the major R&D projects.

On a specific question about the efforts being made to achieve indigenisation of various products & technology by HAL, the Ministry furnished the following:—

“The Company has achieved indigenous content in its sales (through R&D in product and technology) to the extent of 70—75 per cent in manufactures products and to the extent of 80—85 per cent in repair and overhaul services of major products. The process of Indigenisation, will be a continuous effort and increased involvement of private sector industry in low and medium technology areas will be actively encouraged to enable HAL’s expertise to be utilised in high-tech areas. The main thrust in Indigenisation will be to increase in-house R&D and strategic alliance.

A three year Indigenisation rolling plan for the period 2003-04 to 2005-06 has been formulated and is under implementation. In terms of number of items a three year Indigenisation rolling plan for the period 2003-04 to 2005-06 has been formulated and is under implementation. In terms of number of items indigenised, the level of Indigenisation is proposed to be increased to 82% as of March 2006.”

Intermediate Jet Trainer (IJT)

2.10 When asked by the Committee to give details of the Intermediate Jet Trainer (IJT) being developed by HAL, the Ministry stated as under:—

“Recognising that Kiran Trainers of IAF, utilised for Stage-II training, would need to be progressively phased out due to expiry

of the structural life, HAL initiated the proposal for a new Intermediate Jet Trainer, called HJT-36, with features of better performance, higher manoeuvrability, lower operating cost, higher armament carrying capability and with modern System & Avionics. The Government of India accorded approval for the proposal in July 1999 for the design & development of the IJT (HJT-36).

The development of IJT has been progressed and the aircraft has been designed and two prototypes produced. The first flight of the first prototype took place in March 2003 within 20 months of start of metal cutting. Subsequently, the second prototype flew in March 2004. Presently, Larzac-04H20 engine of M/s. Snecma, France is fitted on the prototypes for the development phase of this Trainer. AI-551 of Lyulka Saturn of Russia, has been selected through international competition for the production phase of IJT, which will result in performance improvements. The two prototypes of IJT together have flown around 180 sorties as of end May 2005 towards flight development process. The results from the flight tests carried out have been encouraging as the parameters from the test reports are very close to estimated performance level. Techno commercial proposals have also been forwarded to IAF for manufacturing of 12 IJT Limited Series Production Aircraft. Presently contract negotiations are under way in respect of the above."

2.11 When asked about the difficulties being faced by the DRDO/ HAL in indigenously developing the engine of HJT-36 and steps being taken to overcome those difficulties. The Ministry of Defence has replied as under:—

"The development of any aircraft is invariably undertaken with proven engine and system items in order to minimise the developmental risks. At a later stage, indigenisation of items is taken up."

In respect of status of indigenisation of LRUs, the Ministry has stated that:—

"Indigenisation of avionics/LRUs was considered from the start of the programme and the indigenisation was planned by ARDC, Lucknow, Hyderabad, Korwa and other non-HAL agencies. 85 numbers are developed out of 173 for various system LRUs. Further strengthening of design centres is planned by HAL to increase the pace of indigenisation of avionics LRUs."

2.12 In respect of indigenisation of HJT-36 engine, the Ministry submitted the following:

- “In order to meet the requirement of IJT aircraft, LARZAC-04H20 engine of Snecma, France was selected for the prototypes. But this engine showed marginal reduction in performance in few parameters considering an estimated growth of 10% in weight of the aircraft and 5% increase in drag. Hence it was decided to use higher thrust engine.
- After detailed study and assessment of commercial bids, AL-551 engine of Russia was selected for development by NPO “Saturn” and manufactured by JSC “UMPO” and for License Production and Transfer of Technology to HAL.
- Design of AL-551 engine is based on the principles of design of AL31FP engine. HAL Koraput Division is planning for production of AL31FP engine for SU 30 aircraft. Hence the production of AL551 engine for IJT is also planned at Koraput so that facilities and infrastructures already available can be utilised to some extent for the production of AL-551 engine.”

The Ministry further informed that 179 flights on the two Prototype aircraft have been completed till date. Further tests for assessment of lateral and longitudinal controls will continue.

PTA (LAKSHYA)

In regard to development of PTA (LAKSHYA) the Ministry stated:

“5 PTAs were produced during 2004-05 against an order of 27 Nos. for IAF, Navy and DRDO. Equipping is under progress on 5 aircrafts. Phase 2 development of PTAE-7 engine to meet 9 KM altitude requirement is progressing. Fabrication of 2 flight test engines incorporating modifications was completed in April 2004. Flight tests were carried out on these 2 engines at Balasore in end April 05.”

Cheetah and Chetak Helicopters

2.13 The HAL are supplying Cheetah/Chetak Helicopter to Defence Forces. On the question of Indigenous content in Cheetah/Chetak, the Ministry of Defence has stated that indigenous content in Airframes of Helicopters is 88% and in engine it is 72%. On the question of replacement of Cheetah and Chetak Helicopters which are in service

for many years, the Ministry replied that no decision has yet been taken on the issue.

Advanced Light Helicopter (ALH)

2.14 HAL has developed Advance Light Helicopter (DHRUV) indigenously. Elaborating the features of ALH, the Ministry stated:

“Advanced Light Helicopter (ALH, named DHRUV), designed and produced by HAL, is a 5.5 ton helicopter with multi-role, multi-mission capabilities for use in a wide range of Military and Civil applications. ALH has been designed to meet the most challenging and stringent requirements of the Armed Forces and operators....

With a twin engine configuration ALH provides increased safety and allows continued flight virtually throughout the flight envelope. It is excellently suited for high speed cruise for rapid deployment and to maximize the area of operations. It provides cruise capability for low-speed loiter on station with an option for additional fuel for increased range. It has a large fuel capacity for long range operations, or increased loiter time on station.

ALH can fly 12 fully equipped troops (in normal seating capacity or 14 passengers (in compact seating capacity) or up to 1500 Kgs, in addition to 2 pilots. Along with the rear clamshell doors, the two sliding doors on the LH and RH side of the cabin allow rapid emplaning, deplaning, rappelling and rope extractions most efficiently. A rescue hoist is provided for search and rescue missions.

ALH is designed for extremes of climatic conditions and it has most outstanding hot weather and high altitude performance. Large scale use of composite materials in the structure of the helicopter ensures prolonged performance in coastal and marine environment. It performs efficiently in temperatures ranging between -30 & + 50 degree Celsius.”

As regard the induction of Helicopters into IAF, the Ministry has replied that Six Helicopters have been inducted into IAF and further 7 Helicopters are under induction. Air Force is satisfied with the performance.

2.15 When the Committee wanted to know the production performance of ALH against the Target, the Ministry submitted that out of 18 Aircrafts targeted, 15 could be advanced for one year 2004-05. Giving the reasons for shortfall, the Ministry stated that production for the year was affected due to delay in supply of 470 mm diameter collector gear bearing filled in main Gear by (MGB)

by SMEA, France. These were available only in first week of February 2005.

Exports

2.16 On a specific question regarding status of export market of HAL, the Ministry has stated that HAL has established a foothold in export by competitive bidding in several areas, such as aero-structures to Boeing (USA) & Aerospatiale (France). The spares and services for a variety of military and civil aircraft, engine, equipment, spares and devices. HAL has also been successful in terms of entering export market in the area of Computer Aided Design (CAD) Modelling and Services. Exports in terms of financial figures have grown from Rs. 103.89 crores in 2002-03 to Rs. 214.34 crores in 2003-04.

As regard the areas where the Company plans to capitalize on its export potential, the Ministry submitted as follows:

- (i) Advanced Light Helicopter (Civil & Military).
- (ii) Overhaul services for Military & Civil aircraft, engines & equipment.
- (iii) Supply of metallic and composite aero-structures and engine components.
- (iv) IT based services in the field of Design and Development.
- (v) Maintenance facilities for Civil aircrafts/Helicopters.
- (vi) Multirole Transport Aircraft.

The exports are targeted to reach Rs. 500 crore by 2011-2012. The total sales of the company are targeted to reach around Rs. 15000 crore by 2011-2012.

2.17 The Ministry was asked about the exports performance of HAL during the financial years 2002-03, 2003-04 and 2004-05, the Ministry has replied as under:

“HAL’s exports for last three years have exceeded the MOU targets. Details as given by the Ministry are given below:

Year	MOU Target (Excellent) Rs. in Crores	Exports Achievement Rs. in Crores
2002-03	71.0	103.89
2003-04	78.0	215.35
2004-05	149.0	149.04 (Provisional)”

As per perspective plan, exports are therefore to reach Rs. 500 crore by 2011-12.

Inclusion of Offset Clause

2.18 The Committee was informed that HAL is pursuing for inclusion of offset clause in the draft aviation policy by Ministry of Civil Aviation for early implementation which will help HAL to boost export. In this connection the Ministry submitted:

“HAL has been in correspondence with Ministry for the incorporation of direct Offset clauses while finalizing the Purchase Agreements for military/civil aviation products. HAL with its proven capabilities & facilities had offered its products & services to leverage Offset obligations. Considering wide range of HAL’s experience and with its various centres of excellence, major work packages can be undertaken by HAL to supply against offset obligations of foreign suppliers. This could result in substantial increase in revenue, growth of technology and new business opportunities. Also, HAL has been putting forth for consideration that HAL may be considered to be involved in the negotiations/discussions stage in order to obtain maximum advantages during procurement of military/civil aviation products. Ministry of Civil Aviation is likely to procure new fleet of aircraft for Indian Airlines & Air India. MOD is actively discussing with all concerned regarding incorporation of offset clauses and role of HAL in management of offsets for enhanced exports.”

2.19 The Committee are happy to note that Hindustan Aeronautics Limited (HAL) has evolved itself into a large Aeronautics complex and in many areas, it has built up indigenous comprehensive skills in design, manufacturing and overhaul of fighters, trainers, helicopters, transport aircraft, engines, avionics and system equipment. The Committee, however, observe that there are still some areas which need to be addressed in right perspective in order to have optimum utilisation and better exploitation of capability and potentiality of the HAL such as increase in self reliance or indigenisation of product and technology through more emphasis on R&D and exploitation of global market through export.

2.20 The Committee further note that HAL’s exports, in comparison to its total sales, are very small. During the year 2003-04, the company’s total sales were Rs. 3799.78 crores and the exports were only Rs. 215.34 crores which is less than 6% of the total sales. The Committee hold the view that HAL by virtue of its vast capability and expertise should play a vital role in global market which can be achieved by increased thrust on exports of their

products. The Committee therefore, desire the HAL to formulate a well planned strategy in consultation with experts so as to give export orientation to their products and market them effectively in the global market. for giving wide publicity to their products, Defence attaché posted in various countries should be actively involved to play a positive role in this regard. The Committee would like that a clear cut export policy be laid down to tap the vast export potential not only for the HAL but also for all Defence PSUs products.

2.21 The Committee are also given to understand that proposal for incorporation of direct offset clause while finalising the purchase agreement for military/civil aviation products is pending for clearance with the Government. Keeping in view the fact that this offset clause would result in increased revenue technology upgradation and creation of new business opportunities, the Committee strongly recommend that Government should accord its approval therefore expeditiously.

2.22 Further the Committee, in view of the technological expertise gained by the HAL, desire that it should invariably be involved at the negotiations/discussions stage in order to obtain maximum advantages during procurement of military/civil aviation products. The Committee further recommend that technical expertise of not only HAL but also of other Defence PSUs should be gainfully utilised by associating them at negotiations/discussions stage while finalising agreements for purchase of high tech equipments in their field.

2.23 The Committee also note that in most of the cases, indigenisation is between 70 to 85%. The Committee feel that the remaining 15 to 20% are the critical components for which the country is totally dependent on imports which can at any time be denied by foreign countries. Thus, there is a need to spend more money on R&D efforts so that country's dependence on foreign sources can be minimised.

2.24 The Committee is happy to learn that HAL has developed ALH Dhruv, which is a well equipped advanced Helicopter with capability to operate in extremities of temperatures suitable to Indian conditions. However the Committee note that production target of ALH Dhruv in 2004-05 could not be achieved due to delay in supply of 470 mm diameter collector gear bearing by SNFA, France. The Committee, therefore, recommend that HAL should try to develop

such items indigenously through Transfer of Technology or inhouse R&D to avoid such delays. The Committee desire that besides DRDO, private sector should also be involved in R&D/supply of the critical components so that their expertise/capacity could be beneficially utilised. Keeping in view the highly advanced technology and multipurpose role of ALH (Dhruv) to meet the requirements of modern era, the Committee desire that HAL should vigorously pursue for export of ALH. The Committee also desire that HAL should enter into strategic alliances/business cooperation for enhancing their export in international market.

2.25 The Committee further note that HAL has taken up the development of Intermediate Jet Engine called HJT-36. This project was sanctioned in 1999 and as of now, two prototypes have been developed and trials are going on with different engines. The Committee desire that for development of IJT a time frame be fixed and should be strictly adhered to so that cost escalation etc. could be checked.

2.26 The Committee note that the engine for Intermediate Jet Trainer IJT or HJT 36 aircraft is being imported by HAL in order to minimise developmental risks. The Committee however desire, that HAL should strive for an indigenous engine for this aircraft to make the country self reliant in production of Intermediate Jet Trainer. The Committee also desire that regular supply of engines from MiS Snecma, France and LPO Sateern, Russia should be ensured to avoid future developmental and production difficulties.

2.27 The Committee strongly feel that HAL should now strive to develop Advanced Jet Trainer indigenously. In this connection, the Committee desire that concerted efforts of DRDO/HAL and other related agencies be made to translate it into reality.

CHAPTER III

BHARAT ELECTRONICS LIMITED

3.1 Bharat Electronics Limited (BEL) was established at Bangalore by the Government of India under the Ministry of Defence in the year 1954. Initially, with the technical collaboration from M/s. CSF, France, BEL manufactured Transceivers, used by the Indian Army for radio communication. Since then, to cater to the growing needs of the Defence Services in the area of Electronics, the company has progressed to manufacture high-tech products like Radars, Sonars, Communication equipment, Electronic Warfare equipment, Opto electronics, Tank Electronics, Components etc. BEL pioneered the growth of the Electronic 'Components' industry in the country by setting up the manufacture of Transmitting Tubes, Microwave Tubes, X-Ray tubes, Vacuum Interrupters, Semiconductor Devices, Integrated Circuits, Hybrid Micro Circuits, Liquid Crystal Displays, Solar Cells & Systems etc.

3.2 BEL has also played a significant role in the Civilian 'Professional Electronics' sector of the country particularly for the Ministry of Information and Broadcasting by supplying bulk of its infrastructure requirements for Radio and TV Broadcasting, like Studio Equipment. BEL contributed in the modernisation of the Airports through supply of Primary/Secondary Surveillance Radars to Airports Authority of India. Some of the recent additions to BEL's product-mix in the Civil Sector include Electronic Voting Machine (EVM). BEL has supplied around 5 lakh EVMs to Election Commission and a record number of 2.31 lakh EVMs were supplied during 2003-04, which enabled Election Commission to conduct recent polls through use of EVMs throughout the country.

The Company has one subsidiary (BEL Optronics Devices Limited) and two Joint Venture Companies (GE-BE Limited and BEL-Multione Limited).

Customer Profile

3.3 When the Committee desired to know the customer profile of the BEL, the Ministry submitted:

“the customer profile of BEL can be broadly classified into two groups *viz.*, Defence & Non-Defence (Civil). While the Army, Navy

& Air Force and Defence Public Sector Undertakings constitute the Defence Services, other customers are Paramilitary Forces like Border Security Force, Assam Rifles, Central Industrial Security Forces etc. also procure items from BEL.

Among the Non-Defence (Civil) customers, All India Radio & Doordarshan and Bharat Sanchar Nigam Limited (BSNL) emerge as major customers. Other civilian customers include Airports Authority of India, Indian Space Research Organisation, Railways, Election Commission of India etc. Manufacturers of consumer electronic goods like Radio, TV & other products are also part of the customer profile of BEL.

Around 80% of BEL's turnover has been for the Defence Services and during the year 2003-04, 77% of the revenue accrued from supply to Defence Services."

Infrastructure

3.4 On being asked about the availability of infrastructure facilities, the BEL submitted:

"Over the years, BEL has set up 'State-of-the-art' manufacturing, testing & quality assurance facilities in all its Units and has been continuously updating/modernising them. Online computerisation for Materials Management, back-up support for Standardisation, Technical Information and Documentation, Computer Aided Design and Manufacture have enabled BEL to be a modern professional electronic company."

3.5 As regards to comparative performance of the BEL during the last five years, the Ministry furnished the following information:

Item	1999-2000	2000-01	2001-02	2002-03	2003-04
1	2	3	4	5	6
Value of Production	1543.29	1787.57	2029.98	2536.39	2807.83
Sales	1494.15	1715.33	1941.99	2508.02	2898.59
Export	25.98	31.36	30.71	48.12	40.64
Profit Before Tax	166.43	219.91	284.73	386.16	469.02
Profit After Tax	107.93	155.21	199.68	260.61	316.10
Net Worth	491.25	626.88	777.12	986.62	1229.08

1	2	3	4	5	6
Earning per Share (Rs.)	13.49	19.40	24.96	32.58	39.51
MoU Ratings	Excellent	Excellent	Excellent	Excellent	Excellent
Manpower	14807	14177	13572	13750	13038
Turnover per employee (Rs. Lakhs)	10.09	12.10	14.31	18.24	21.46
Value Added per employee (Rs. Lakhs)	4.67	5.54	6.42	7.20	9.49

Research & Development

3.6 On being asked about the Research & Development activities being undertaken by BEL, the Ministry stated:

“BEL Established Research & Development departments from mid 1960s. Numerous collaboration agreements entered into by BEL prior to this period enabled BEL to acquire enough capability to assimilate the technologies taken from foreign manufacturers. BEL has set up in-house Research & Development groups in all the Units in the respective product area.”

3.7 On the question of taking the help from DRDO in R&D activities to set up a state of art manufacturing, testing and quality assurance facilities, the Ministry stated:

“BEL has established strong relationship with DRDO and its Labs. BEL does concurrent product development and is involved with DRDO Labs right from start of the project. DRDO is a very important partner with whom BEL has developed large No. of products indigenously. Around 15% of BEL’s turnover comes through products developed by DRDO and its Labs and this will continue to improve in the coming years as large number of products are going to be inducted for Defence Services. BEL also at times is seeking DRDO’s test facilities to test some of the systems/sub-systems as required. BEL had taken help from NPOL for transducer and other underwater measurement facilities, from LRDE for EMI/EMC measurements, from IRDE for Laser measurements, from DLRL/RCI, EW testing facilities etc. till facilities were created at BEL during Productionisation.”

3.8 The Ministry has further stated that BEL is closely associated with the following Labs of DRDO for development of new products, which are as under:—

Centre for Artificial Intelligence & Robotics (CAIR)

Centre for Airborne Systems (CABS)

Combat Vehicle Research & Development Establishment (CVRDE)
Defence Electronics & Application Lab (DEAL)
Defence Electronics Research Lab (DLRL)
Defence Avionics Research Establishment (DARE)
Defence Research & Development Lab (DRDL)
Instrument Research & Development Establishment (IRDE)
Electronics & Radar Development Establishment (LRDE)
Microwave Tube Research & Development Centre (MTRDC)
Naval Physical & Oceanographic Lab (NPOL)
Naval Science & Technological Lab (NSTL)
Research Centre Imarat (RCI)
Research & Development Establishment (Engineers) (R&DE)
Scientific Analysis Group (SAG)
Vehicles Research & Development Establishment (VRDE)

3.9 The Committee wanted to know how far BEL has utilised/inducted the achievement/developments of various defence research units to reduce the import content in sophisticated electronic products for radar aviation application, the Ministry informed the Committee as under:—

“BEL has established a very good rapport with LRDE since early days and BEL & LRDE have a history of cooperation with each other in developing state-of-the-art indigenous Radar systems for India’s defence requirements. BEL has also acquired relevant technologies to indigenise radar subsystems like Antennae, IFF systems, Microwave Tubes, Microwave Components etc. required for various radar systems from various Labs like LRDE, DLRL, CABS, MTRDC etc.”

3.10 The Ministry has also informed that in addition to the Research & Development groups in all the Units, the company has set up two Central Research Laboratories (CRL) at Bangalore & Ghaziabad for undertaking research in futuristic areas with a view to identify and realise latest technologies relevant to the company’s products. The intention is to make Bharat Electronics a fountain head of electronics technology thus improving its leadership position within the Indian electronics industry and making it a major international electronics

company. R&D expenditure of BEL has risen from Rs. 77 crore from 1999-2000 to Rs. 130.61 crore in 2003-04.

3.11 The Committee enquired about the initiatives taken by BEL in R&D front, the CMD, BEL stated:—

“For some normal development projects within the company, we are able to invest on our own. But there are some strategic projects which the country needs. We have to develop the technology within the country. For that investment requirements are very high. But they are economically viable. For that we have requested the Government for funds.”

3.12 The CMD further informed that they have approached Planning Commission for additional Rs. 1000 crore for R&D investment about six months back but they have not yet taken any decision.

3.13 On the development and procurement of radars, during the oral evidence, the Defence Secretary has stated:—

“.....our emphasis is on western model of radars. The coverage of radars should be increased as well as their numbers. The discussion in the Ministry are going on whether BEL can make radars or we have to buy it from abroad, types of radars, their cost factor is being taken into consideration.”

Diversification/Future Plans/New Products

3.14 On being asked by the Committee about the diversification/future plans/new products, the BEL submitted:—

“Though supplies to Defence constitute a majority share in BEL's turnover, BEL realises that, to grow in the years to come, it has to seek other potential areas and diversify into them. BEL has been continuously introducing new or upgraded products, every year, based on in-house/indigenous technology in its efforts to be in the forefront of technology. Also the expertise gained by BEL due to its operations in the defence sector has resulted in the emergence of spin-off technologies. Some of the major areas of diversification are listed below:—

- (i) Telecommunication-Switching Equipment, Access Products, Point-to-Multipoint Radio, Mobile Satcom
- (ii) Information Technology-Data Encryption, SIMPUTERS

- (iii) Modernisation of Airports-ASR/MSSR Radars, Display Systems
- (iv) Energy Saving Products-Solar Cells & Systems
- (v) Satellite Communication-Doordarshan, BSNL, Corporate Houses, Distance Education
- (vi) Products for Ministry of Home Affairs-Secure Message Terminals, Transreceivers, Night Vision Devices, SECTEL, SECFAK etc.
- (vii) Smart Cards/Access Systems
- (viii) Compact Vacuum Interrupter Tubes
- (ix) Telemedicine System
- (x) Vehicle Tracking & Monitoring System
- (xi) Set Top Box."

Exports

3.15 When the Committee wanted to know the export status of BEL in terms of value, the Ministry has stated:

"BEL met and exceeded the export targets set by MoD for both the years.

Year	Target	Actual	
	US\$M	US\$M	Rs. Crore
2002-03	8.00	10.16	48.12
2003-04	8.80	9.23	40.64

The exports during 2002-03 included a one-time export of Skyshield Air Defence Radar System to M/s. Oerlikon Contraves (OCAG, Singapore) worth US \$ 4.41 M. But for this aberration during 2002-03, the exports of the company have improved. The export figure for the year 2004-05 is US \$ 12.72 M (Provisional). The accounts are under finalization."

Indigenisation/Cost Reduction

3.16 In reply to a question of the Committee on indigenisation efforts by BEL, the Ministry stated:—

"indigenisation is continuing activity in BEL to conserve foreign exchange and also a measure of self-reliance. Raw Materials,

Components and Sub-assemblies are covered under this activity. In addition, the company also encourages indigenous development and manufacture of capital equipment through its own Projects & Consultancy Group. BEL has been systematically indigenising the components & sub-assemblies of ToT products in a phased manner, in order to avoid over-dependence of the foreign sources on a continuous basis, overcome possible sanction related issues and ensure a base for providing product support to the customers during the entire life of the product.”

When the Committee desire to know the ratio of success in achieving indigenisation, the Ministry stated:

“the indigenisation effort in the company has been quite successful and BEL could achieve substantial amount of cost reduction through indigenisation. In some of the major projects, the current level of indigenisation against start of the production is indicated below:

Equipment	Indigenous Content	
	At the start of Production	Current Level
USFM Radar	28%	70%
Flycatcher Radar	15%	60%
Reporter Radar	5%	75%
UHF Radio Relay RL 432	5%	56%
Laser Range Finder LH-30	20%	70%
HHTI	5%	35%
PRC 6020	8%	66%

The company has identified Indigenisation as one of its Thrust Areas. At the beginning of each year, every business unit identifies potential areas for indigenisation, be it a project through in-house R&D, through DRDO or through ToT route. Through the active participation of Standards Department and others involved in the project from the business units, actions are taken to indigenise the identified items and evaluate them for the intended applications.

The company has a Standards Department, which, apart from standardizing raw materials and components, is involved with task

of identifying indigenous sources for the above items. Constant interaction takes place between the Standards Department and identified vendors, who are supported by BEL in this task.”

As regards the cost-reduction the Committee were further informed:—

“Cost Reduction for Survival” has been the motto in the company during the past five years. Specific thrust has been given to cost reduction in all areas of activity. Task Forces have been formed in all the Units to address areas like indigenisation, design change, alternate sourcing, alternate components, negotiations, energy savings etc. This has resulted in a significant cost reduction in all the Units of BEL. Because of BEL’s continuous cost reduction efforts, it could contain the cost escalations and could absorb the usual escalations due to inflation, exchange rate variation etc., and offer products without escalating its prices over the last supply prices or with minor increase in prices. All the 9 Units of BEL have been making profits during the last five years. Profit of the company has been increasing steadily.”

3.17 On being asked by the Committee to state what strategy which have been formulated by the Ministry to increase the clientele of BEL (particularly in civil side) in order to earn more revenue, the Ministry has replied as under:—

“BEL has been systematically addressing areas other than the Defence customers and focusing on diversifying into certain areas of civilian electronic products like SATCOM equipment, Airport Surveillance Radars, Electronic Voting Machines, Solar Photovoltaic Systems (Traffic Lights, Power Plants), Vacuum Interrupters, Set Top Box, Multipurpose National Identity Card (MNIC) project, Simputer, Smart Card Systems etc. BEL has executed SATCOM network for Andhra Pradesh Government and is in the process of executing the same for Police network in the entire country. BEL has also set up a Systems Strategic Business Unit to explore and address the civilian market. This process of diversification will be continued.”

Modernisation

3.18 When the Committee asked about the steps taken by the Ministry to modernize BEL to bring it to world standard company, the Ministry replied as under:—

“BEL is involved in the manufacture of sophisticated electronic equipment wherein the technologies of not only the products, but

also the processes change continuously. Specific groups in all the Units continuously scan the technology changes that are taking place and new machines introduced all over the world towards identifying new machines to be introduced in the company. This enables the company to maintain the manufacturing expertise at par with international standards. Whenever a new product is introduced based on in-house/indigenous design or collaboration, new manufacturing line/plant & equipment are acquired driven by the new product technology. To meet the stringent requirement of new technology, "BEL has adopted various Quality Initiatives like Six Sigma Methodology as a process for achieving breakthrough solutions, has set up Quality Improvement Teams in different work areas, benchmarking of processes and self-certification of some of its products. The company has been strategically adopting this philosophy for introducing modern facilities and updating the technology status in all its Manufacturing Units, like setting up of Advance Manufacturing Facilities, CNC Facilities and Test Facilities. BEL has also taken up development of new products based on internal R&D on a proactive basis to meet the customer requirements."

3.19 The Committee note that 80% of BEL production in 2004-05 was meant for defence forces. The Committee further note that BEL has taken a number of steps to meet the demands of civilian electronics sector also. The Committee feel, that while meeting the demand of civilian sector, priority should always be given to the defence sector.

3.20 The Committee are happy to note that BEL has established strong relationship with DRDO and its labs in R&D activities and is also doing concurrent product developments. The Committee, feel that BEL, in partnership with DRDO, should intensify their R&D programme so that more and more electronic systems used in defence equipments can be indigenously manufactured. The Committee note that BEL has put up proposal for Rs. 1000 crore grant to Planning Commission for undertaking research in some strategic areas for which the Commission has not given its decision even after a lapse of six months. The Committee are of the view that such a project which undertakes research to develop technology in strategic area, involving very high expenditure, should be funded at Government level with close and effective monitoring. They, therefore, desire the Planning Commission to urgently take a decision on BEL proposal and make available requisite funds so that work on the project can start at an early date. The Committee further desire that BEL should

also invest in R&D from the profit earned by the company. In this regard, BEL can also take advantage of inbuilt provision in income tax laws wherein they can seek suitable exemption in the income tax for the investments made in R&D. The Committee feel that BEL, besides DRDO, should also coordinate with other defence public sector undertakings in R&D field. It should invest money only on those areas which have not been covered by any of the PSUs so as to avoid duplication of efforts. The Committee also desire the Ministry to explore the possibility of involving private sector in various selective R&D projects and manufacturing of various products.

3.21 The Committee also feel that quality upgradation and cost-effectiveness of defence products are imperative to keep the Defence PSUs, including BEL, vigilant, agile and responsive to the needs and concern of Defence forces. The Committee therefore desire that BEL should continuously introduce new or upgraded products every year based on in-house/indigenous technology in its efforts to be in the forefront of Technology. The Committee feel that to achieve the goals of modernisation, concerted efforts need to be made with a clear mandate. Production of items should be undertaken side by side with quality upgradation and cost effectiveness so as to attract global market also.

CHAPTER IV

BHARAT EARTH MOVERS LIMITED

4.1 Bharat Earth Movers Limited (BEML) came into being in May 1964 as a Public Sector Undertaking. It is under the administrative control of Department of Defence Production, Ministry of Defence. BEML commenced its operation from 1st January 1965 with the production of Rail coaches and assembly of spare parts at its Bangalore Unit. The Company has six manufacturing units established at Bangalore, Kolar Gold Fields (KGF) and Mysore including a 10% subsidiary steel foundry in Tarikere, Chikkmagalur District—all in the State of Karnataka. BEML's Bangalore complex has been established basically as a manufacturing unit for rail coaches and related rail products.

4.2 The Committee during study visit to Bangalore also held informal discussion with the representatives of the BEML on certain issues *viz.* capability to manufacture Railway coaches and wagons, export possibility, financial performance and order book position etc. BEML, during the study visit of the Committee, *inter alia* sought support from the Committee in obtaining MINI-RATNA status.

Financial Performance and Order Book Status

4.3 When Committee asked about the financial performance and order book status of BEML, the Ministry submitted:—

“The turnover of the Company started with Rs. 5.17 crores in 1965 and has crossed Rs. 1765 crores by end March 2004. The Order Book as on 01-04-2004 is Rs. 2100 Crs. Company has been making profits right from inception and posted a record PBT of Rs. 50.17 Crs. in 2003-04. The company has set for itself a turnover target of Rs. 1987 Crs. and is confident of achieving the same. The company has on hand, an order book of Rs. 2005 crore as on 1st April 2005, which consists of Rs. 1276 crore for the current year and the balance for supply in the subsequent years. BEML is in Defence business for quite some time supplying critical and essential ground support equipment and almost 40% of the turnover of the company comes from Defence sector. However the constraint in this business is the placement of continuous orders by the Defence Services.”

4.4 As regards order book position, the Ministry further stated:—

“BEML’s Bangalore complex has been established basically as a manufacturing unit for rail coaches and related rail products such as DC/AC EMUs, rail coaches and other related special products required by Indian Railways and was totally dependant on orders from Indian Railways for feeding the dedicated facilities and manpower of the unit apart from export of coaches. The established facilities is for 400 coaches per annum. This capacity and infrastructure at BEML has been taken on record by the Indian Railways while obtaining cabinet approval for setting up for new railway production units at Kapurthala. As against the rated capacity for 400 coaches, except for the year 93-94, the capacity has not been fully exploited due to lack of order from Railway Board.”

Perspective Plan

4.5 When asked by the Committee whether the company has prepared a long term perspective plan, a representative of the Ministry replied:—

“The Perspective Plan of BEML has been prepared by BEML. A growth rate (Cumulative Average Growth) of around 8% per year has been envisaged in the plan keeping in view the prevailing market conditions and areas of diversification possible in the coming years.”

4.6 On the query of the Committee, the Ministry has stated that BEML has prepared corporate plan taking the turnover to over Rs. 5000 crore by 2013-14 which coincides with the Golden Jubilee year of the Company. The details of the year-wise plan and the business group-wise break-up are projected below:—

	(Rs. in crore)		
Business group	2005-06	2009-10	2014-15
Earthmoving eqpt. & spares	1050-1200	1050-1250	1100-1500
Defence	1050-1250	850-1250	850-1450
Railways	200-300	450-1000	750-1300
New Business	90-165	500-750	1000-1400
Grand Total	2390-2915	2850-4250	3700-5650

The company intends to augment the manufacturing facilities to meet the above sales and volumes by suitable capital investments in plant and machinery. In addition to this, outsourcing of certain processes is also envisaged.”

4.7 When the Committee asked about the possible new avenues, where company can grow and raise more revenue, the representative of the Ministry stated:—

“BEML is also in railway business including metro and in mining construction business and the said business, as an average gives the company a business turnover of 50-60%. BEML’s endeavour is to increase Defence portion of the business and hope the volume continues to grow when the company’s turnover improves. In EM segment to compete with MNCs and lowering of import tariffs and easy import of second hand equipment will also have adverse impact of company’s sales. In rail coaches, the pricing is based on pricing fixed for Indian Railway production unit and no guarantees of continuous order.

The Ministry has further stated that the company depends on purchase preference policy of government and any possible removal of the same in future will severely affect the sales turnover and growth. Even now the purchase preference policy is not renewed beyond 31.03.2005.”

Research & Development

4.8 On a specific question raised by the Committee regarding activities being undertaken by the company on R&D, the representatives of the Ministry replied:—

“The Company has a strong base of in-house design and development setup. Company’s R&D division at KGF has designed, developed and successfully productionised a number of new products. The activities of R&D include technology absorption, import substitution, cost reduction and product development for domestic and export markets. Company has R&D units for Design and Product Development at both Bangalore and Mysore Complexes. The company has employed 134 engineers in R&D.”

4.9 On being further asked by the Committee about the reduction in R&D expenditure, the Ministry has stated:—

“There has not been any reduction in R&D expenditure during the last three years. There is no perspective plan for R&D. However, we are making a perspective plan for R&D now.”

4.10 From the material furnished by Ministry it is seen that there is an increase in import content of BEML. The Ministry in reply stated:—

“The import content has shown an increase over the above period on account of the sales turnover of the company which has increased from Rs. 1317.09 crore in 1999-2000 to Rs. 1856.01 crore in 2004-05 and subsequent to the year 1999-2000 BEML has introduced various new products such as Tatra Trucks, ARVs, HRVs etc., For these models imported content is high due to phased indigenisation programme. During the said period, supply of Defence products has increased from Rs. 304.86 crore. (1999-2000) to Rs. 562.99 crore (2004-05) and therefore there has been a corresponding increase in import content.

BEML’s products are sold and serviced through its large marketing network. The Marketing Division, in addition to sales and after-sale activities, provides support services like application engineering, rehabilitation of equipment, training facilities to customers’ operation and maintenance staff and equipment operators etc.”

Exports

4.11 When the Committee asked about the exports performance of BEML, the representatives of the Ministry replied:—

“BEML’s products are exported to almost 30 countries such as Middle East, Syria, Tunisia, UK, South Africa, Jordan, Sri Lanka, Bangladesh etc. Till date, BEML has exported goods and services valued around Rs. 650 crores. BEML has secured repeat orders from countries like Syria and Tunisia for its products in view of their commendable performance. BEML is adopting new strategies to create brand image and international presence for its products. Company has set an ambitious export target of Rs. 137 crores for the current year.”

4.12 The Committee note that BEML Bangalore was established basically as a manufacturing unit for rail coaches and related rail products. The Committee, however, observe that since 1998-99, the installed capacity of BEML for 400 coaches has not been fully exploited due to lack of orders from Indian Railways. The Committee feel that Ministry of Defence should take up the matter with the Ministry of Railways at the highest level so that sufficient orders are placed on BEML and its capacity could be utilised fully. The

Committee would like to have details of efforts made by the Ministry in this regard.

4.13 The Committee note that BEML also produces Metro Coaches which are at par with imported coaches in terms of quality and performance and has full order book position. The Committee, however, note that a major bottleneck is being faced by BEML in achieving the production quantities as per delivery schedule i.e. delay in receipt of "free supply items" such as steel, wheel sets, etc. from Indian Railways. The Committee, therefore, stress that in order to supply full order of coaches to Metro, it is essential that the matter may be taken up with the Ministry of Railways to redress the bottleneck coming in the way of achieving the production quantities as per delivery schedule.

4.14 The Committee note that BEML which is supplying critical and essential ground support equipment to the Defence services, is facing problem of placement of continuous orders from them. The Committee, therefore, desire that the Ministry should ensure that sufficient orders are made available to BEML in consonance with the perspective plan of Defence services.

4.15 The Committee are concerned to note that there has been a continuous rise in import content due to increase in the sales turnover of the company. The Committee are of the view that there is an imperative need to prepare a long term perspective plan to reduce import content in a planned and phased manner and to make the company self-reliant.

4.16 The Committee also note that the profitability of BEML depends on purchase preference policy of government and the same has not been renewed beyond 31 March 2005. Since BEML is supplying critical ground support equipment to defence services, Government should renew purchase preference policy in favour of the company. The Committee also desire that BEML should also strive to consolidate its strength to face competition so that it may not have to depend on Government purchase preference policy in future. The Committee are of the view the BEML should also strive to be closely and exclusively associated with defence industry and supply critical and essential ground support to the defence services. In this connection, the Committee desire that Government should examine this issue and try to separate non defence production of the BEML. The Committee also desire that there should be a separate organization for production of non defence products like rail coaches and other rail products.

CHAPTER V

BHARAT DYNAMICS LIMITED

5.1 Bharat Dynamics Limited (BDL), a Government of India Enterprise under the Ministry of Defence, was established in 1970. BDL is one amongst a few industries in the world having the capability to produce state of art guided weapon systems. BDL is the prime production agency for all the missiles, developed by DRDO under Integrated Guided Missiles Development Programme (IGMDP).

Major Activities of BDL

5.2 The Ministry of Defence has stated that BDL is manufacturing Guided Missiles, Torpedoes and Decoys under licence and supply the same to Armed Forces. It is supporting Defence Research & Development Organisation (DRDO) in realising new missiles and Torpedoes. BDL is the manufacture of some of the DRDO developed missiles & Torpedoes. The company is developing the associated equipment for missiles/torpedoes, refurbishment of missiles as required by the Armed Forces Indigenisation of the sub-systems of the missiles and manufacture missile components for export to OEMs abroad.

5.3 On being asked by the Committee whether BDL has or plan to develop by using the experience of three decades in manufacture of missiles, the Ministry has replied that BDL has not developed any Missile Defence System and has no immediate plans for the same.

When Committee desired to know the new projects of BDL and target of dated for their completion, the Ministry furnished details of the status of new projects under progress, which are as under:

New Products

Status of new projects under progress:

- | | |
|----------------------------------|--|
| (a) TAL (Advanced Light Torpedo) | BDL supplied 5 no. of D&E version. Users trial completed successfully. |
| (b) Decoy C-303: | Contract awarded to BDL for execution. |

- | | |
|---|---|
| (c) Life Extension/Refurbishment: | Proposals for R-60MK and Shtrum under consideration by MoD. The proposal for refurbishment for R-73 submitted to IAF. |
| (d) Milan-2T (ATGM) | REP to OEM under issue. |
| (e) IGLA-S (MANPADS) | RFP received by BDL. |
| (f) Takshak (HWT) | Project being revised by Naval Hqrs. |
| (g) LAHAT | Demonstration trial from Arjun Tank completed successfully. BDL may be nominated for production of this under licence. |
| (h) ATGM for ALH & special forces | Light Weight ATGMs are being considered as a weapon fit for ALH. The selection process in progress. |
| (i) K-15 Missile | Missile under development by DRDO. BDL is involved in system integration for missiles for development and user trials. |
| (j) Anti Torpedo Surface Launch Decoy System | Navy is considering procurement of Anti-Torpedo Surface launched Decoy system for its ships. BDL has been nominated for manufacture of Naval Decoy System and may be nominated for the production of the surface launched decoys. |
| (k) ASTRA | The missile is under development by DRDO and subsequent to completion of the user trial, production may be taken up by BDL. |

Capacity Utilisation

5.4 On being enquired about the capacity utilization and Order Book position of the company, the Ministry has provided the following data in regard to manpower and machine utilisation and order book position:

Details	2000-01	2001-02	2002-03	2003-04	2004-05
Manpower	73%	74%	74%	58%	47%
Machines	55%	54%	51%	38%	44%

Order Book Position

As on	Orders on Hand (Rs. in crores)
1st April 2001	1022.83
1st April 2002	1556.25
1st April 2003	2492.28
1st April 2004	2479.46
1st April 2005	1957.00

During the study tour CMD, BDL submitted that to maximise the utilisation of the investment made by the Government in BDL, all missiles and torpedoes that are indigenously developed or planned for procurement from abroad, should be manufactured by the BDL.

Manpower Planning

5.5 During the oral evidence, the Committee desired to know manpower position in the company. The CMD, BDL stated:

“We have carried out gradual reduction in the manpower by not inducting persons in place of personnel who are retiring. We have also been giving VRS to our employees. We are totally following the requirements of the Government of India in regard to SC, ST and ex-servicemen. They have been employed in the desired ratio as has been desired by the Government of India..... it is 5 per cent. This ratio has come down because we have not been inducting any manpower in the last 5 years. The greater number of persons who have been retiring belonged to ex-servicemen who joined at a higher age while the other have not retired. This ratio would be met once we start inducting manpower.”

Mini Ratna Status to BDL

5.6 During the oral evidence Committee wanted to know the status of the company as to whether it is Mini Ratna or not, the CMD, BDL stated:—

“We have not yet become a Mini Ratna in the sense that we have not yet got non-official independent Directors in the Board BDL yet. We will start operating as Mini Ratna once we have these independent Directors on the Board..... In our Board of Directors, we have four Directors as working Directors from within the company. We have DRDO representative, three representatives from the Ministry, two Deputy Chiefs, one Air Force Deputy Chief and one Army Deputy Chief.”

5.7 On a query regarding the number of Government representatives allowed on Company Board to be considered for Mini Ratna status, the CMD, BDL stated:

“The Ministry has taken a proposal from us in which we have recommended that there would be two Ministry’s representatives and three external representatives. We have recommended that the Service representatives should stay. We have recommended that at least one Service representative should stay because they form as a helping hand to us.”

On being pointed out that the condition of less or number of Government Director on Board should not apply to strategic industries, the Defence Secretary stated:

“We have taken same stand. But basically what the Department of Public Enterprises wants is that companies must become more and more professional and too many Government Directors make it like a Government Department. Therefore, this is a constraint. Our argument has been that there are customers and customers’ representatives should be there and they are very useful Directors in the Board. But that does not cut too much of ice.”

Explaining the advantages of Mini Ratna, the Defence Secretary stated that Mini Ratna or Nav Ratna can form joint venture.

5.8 The Committee note with concern that capacity utilisation of the Bharat Dynamics Limited (BDL) in terms of both manpower and machine has been decreasing since 2002-03 and the order book position has also gone down from Rs. 2479.46 on 1 April 2004 to Rs. 1957.00 on 1 April 2005. To maximise the utilisation of the capacity of BDL, the Committee recommend that all missiles and torpedoes

that are indigenously developed or planned for procurement from abroad under ToT, should be given for production to BDL.

5.9 The Committee note that BDL manufactures products like Milan and Konkurs ATGMs under licence from French and Russian Companies and before these products can be exported, BDL requires clearance from the Original Equipment Manufacture (OEM) and Ministry of Defence. The Committee, therefore, desire that BDL should scrupulously examine and identify the products, which have the export potential, on case to case basis and get the approval of OEM and Ministry of Defence, in order to augment its revenue resources. The Committee, further desire that Ministry while making procurement under Buy and Make category, should examine the feasibility of inserting suitable clause to avoid clearance from the Original Equipment Manufacturer for exporting these products.

5.10 The Committee feel that in view of increasing threat perception of missiles from enemy, ballistic missile defences are essential in order to defend the country. The Committee, therefore, recommend that a time bound programme must be chalked out urgently to develop the Missile Defence System, so that our defence forces can counter any possible attack from any hostile country.

5.11 The Committee note, that the number of new projects undertaken by the BDL are in different stages of progress and none of the project has been completed in toto. The Committee, therefore, would like that all out efforts should be made by the Ministry/BDL to complete these projects and in a time bound manner. The Committee would also like to have details of commissioning stage of the projects, targets fixed for completion, reasons for delay in completion corrective measures taken in this regard.

5.12 The Committee note that the Government has not granted status of Mini Ratna to BDL as it does not fulfil the prescribed criteria of independent Directors on the Company Board. The Committee have also been informed of the advantage of Mini Ratna status to PSUs i.e. it provides them more functional autonomy and enables them to form joint ventures. The Committee are of the strong view that for strategic industry like BDL, different criteria for granting Mini Ratna status should be prescribed. Because of its very nature, defence industry cannot have independent Directors on Company Board. The Committee, therefore, recommend the Government to review the criteria for granting status of Mini Ratna particularly to the defence industries including BDL so as to enable it to avail the benefit of Mini Ratna.

CHAPTER VI

MISHRA DHATU NIGAM LIMITED

6.1 Mishra Dhatu Nigam Limited (MIDHANI), Hyderabad was conceived in the early 70s to achieve self-reliance in areas of special steels, superalloys, titanium alloys etc. for strategic sectors and came into existence as a Corporate Body (*i.e.* DPSU) in 1973 under the administrative control of Ministry of Defence, Department of Defence Production and Supplies. By that point of time the country had made some progress in the strategic sector like nuclear power generation, manufacture of air craft, rocket launching by Department of Space etc. However, there was no facility to make special alloys required for these activities and there was heavy dependence on import of these alloys. For setting up MIDHANI, technical collaboration with Creusot-Loire, Pacheiny UGINE Kuhlmann of France and Krupps of Germany was entered into with a view to achieve some degree of self-reliance in special steels, superalloys and titanium needed by critical sectors such as Defence, Aeronautics, Nuclear and Space.

6.2 The Ministry has stated that for nearly two decades now, MIDHANI has been handling challenging developmental tasks, taking a lead position in indigenisation of critical technologies and products to render support to several programmes of national importance and hi-tech segments of Indian Industry. In the Defence sector they comprise missile development programme, T-72 Tanks, 155 mm Howitzer, MBT Arjun Tanks, MiG, Kaveri Engine Programme (LCA), Prithvi & Agni, special materials and weld electrodes for Advanced Technology Vessel Programme (AVTP) in the Space sector they include PSLV, GSLV, Niobhat-101 a Hafnium alloy and in the field of atomic energy the very special steels for nuclear power plants and fuel reprocessing.

Product Profile

6.3 On being asked by the Committee regarding product profile of the MIDHANI, Ministry stated:

“The product range of MIDHANI can be divided into five major categories viz. superalloys, titanium alloys, special purpose steels, special products (weld consumables for Navy, Titanium and Steel Tubes for Power plants, Moly Wire and Plates for Auto, Lamp Industries and Moly Boats for Nuclear) and alloys for electrical and electronics applications with and application in the form of Forgings, Rods, Sheets, Strips, Wires, Remelt Sticks and Castings.”

6.4 In reply to a question raised by the Committee regarding the total turnover of the company and the steps taken by the Ministry to increase the turnover, the Ministry furnished the following data:

(Rs. in Crore)

Particulars	2000-01 Actual	2001-02 Actual	2002-03 Actual	2003-04 Actual	2004-05 Actual
Sales	112.61	104.30	91.52	125.13	131.27
Value of Production (Incl. of ED)	113.87	107.17	93.50	116.42	141.67

6.5 According to the Ministry the installed capacity of the furnaces in MIDHANI *vis-a-vis* sales turnover is as under:

Melt Furnace	Capacities (No of Heats)		Sales Expected		Total expected Sales Value (Rs. Lakh)
	Per month	Per Annum	Qty (MT)	Avg. Value Rs./Kg	
ARC Furnace	50	600	1200	300	3600
VIR Furnace	15	180			
AIM	20	240	240	450	1080
VIM	20	240	240	2000	4800
VAR-I	25	500	65	2000	1300
			(Titanium)		
Molybdenum	—	—	15	2400	360
Total					11140

6.6 As regards the efforts made by the company in converting its material into value added products, the Ministry has further stated that:

“The melting capacities available in the company translates into a annual sales of Rs. 111.40 Crore. However, company taken up several value added jobs of providing the customer not just the material but the finished product by utilizing the facilities available in other PSUs like RSP, Rourkela, NFC etc., in converting its materials into value added products to increase its turn over. This has resulted in improved sales turnover in the last two years.”

Upgradation & Modernisation

6.7 When asked by the Committee regarding upgradation and modernisation of MIDHANI, the Ministry informed:

“It is estimated that the total modernization of MIDHANI into a state of the art Company would involve an investment of about Rs. 1000 Crore to Rs. 1200 Crore. As this being not feasible, Company has identified bare minimum equipment/facilities that require immediate up-gradation and modernization so as to meet the strategic material requirements of major programmes announced by Defence, Space, Atomic Energy, Defence PSU’s and Ordnance Factories, in the next five years. The fund required for this purpose has been assessed at Rs. 100.63 Crore. Proposal for modernization is under the consideration of Government.”

Elaborating on the need for modernisation of company, during the oral evidence, the Chairman & Managing Director (MIDHANI) stated:

“It is a 30-year old Company. For the last 30 years, MIDHANI has not been modernised. If this company is not going to be modernised, then most of the strategic products would be jeopardised. As the Secretary has mentioned, the Government of India has given active consideration to us. We are in the process of being sanctioning a sum of Rs. 66 crore, and Rs. 35 crore has been given to us by the Department of Space for modernisation. This is only phase-I for carrying on the manufacturing of materials, which are required by the strategic industries.”

As regards the upgradation of plant machinery and facilities at MIDHANI, the Ministry stated:

“The Plant, Machinery and Facilities at MIDHANI have not been up-graded and modernized in the last two decades. Sensing the need the Ministry had set up a Committee to review the working of MIDHANI. The Committee has recommended investments for the up-gradation and modernization of the outdated and obsolete facilities. Ministry has moved a cabinet note for providing a budgetary grant of Rs. 66.63 crore to MIDHANI for its modernization plan. With the modernization and creation facilities financed both by the Ministry and MIDHANI’s customers would ensure MIDHANI achieving a sales turnover of about Rs. 330 crore by 2010-11.”

Self Reliance

6.8 In reply to a question raised by the Committee regarding efforts being made by the Ministry to make special alloys required for nuclear power generation, manufacture of aircraft etc, with a view to achieve a degree of self reliance, the Ministry has stated:

“MIDHANI has already indigenised 13 of the 19 alloys required for SU-30 aero engine programme of HAL. These 13 alloys are already presently being supplied by MIDHANI to HAL for MiG programme. MIDHANI jointly with HAL is contemplating indigenisation the remaining six alloys to become self reliant in the manufacture of aero-engine for SU-30 programme.”

According to the Ministry, MIDHANI has achieved self-reliance in the areas of Missile programme, Aeronautics, Navy, Space and Atomic Energy.

Bullet Proof Jackets

6.9 On the question raised by the Committee regarding making light weight and cost effective Bullet Proof Jackets (BPJs), the Ministry stated:

“MIDHANI is in the business of 100% indigenous manufacture of Bullet Proof Jacket (as per MIDHANI Grade MDN 45 Armour plates) and Bullet Proof Patka (Head Gear). However, Bullet Proof Jackets (BPJs) made by MIDHANI are heavier in comparison with foreign make. For Protection against 9 mm SMC (5.5 Kgs) from a distance of 10 meters-Rs. 5,000/-each, Protection against AK 47 (9.0 Kgs) from a distance of 10 meters-Rs. 5,300/-each, Protection against 7.62 SLR (9.5 Kgs) from a distance of 10 meters-Rs. 5,800/-each.”

6.10 The Ministry further stated:

“Presently Indian Army and other Para Military Forces have been seeking Light Weight Bullet Proof Jacket (LWBPJ). The specification of LWBPJ are different from the one being manufactured by MIDHANI. The MIDHANI BPJ is of Hard Armour (weight ranging from 9 to 9.5 kgs) and the BPJ sought by Indian Army and other Para Military Forces was Soft Armour Panel (SAP) (weight ranging from 5 to 5.5 Kgs)”.

6.11 The Ministry has also informed that “SAP is made up of hybrid materials like aramid and unidirectional polyethylene and are

in the nature of composites and not materials. Hence MIDHANI's (BPJs) manufactured from Armour Steel is not comparable with LWBPJ now being sought by Indian Army and other Para Military Forces."

6.12 During the oral evidence, the Committee desired to know the weight of imported jackets, the CMD, MIDHANI informed the Committee that weight of foreign made jackets is between 3.5 kgs to 4.5 kgs.

6.13 The Committee note that MIDHANI is supplying special steels, super alloys and titanium alloys for strategic sectors, which forms the core material not only for defence needs but also for space and atomic energy programmes, and these alloys are very crucial in timely completion of various projects of strategic importance. The Committee are constrained to note that despite the critical importance, the plant, machinery and facilities of MIDHANI have not been up-graded and modernized for the last two decades. The Committee also note that a Committee set up by the Ministry to review the working of MIDHANI has recommended for the up-gradation and modernization of the outdated and obsolete facilities of it with adequate investment. For this purpose, the Ministry has moved a Cabinet note for providing a budgetary grant of Rs. 66.63 crore to MIDHANI for its modernization plan. The Committee, therefore, recommend that MIDHANI should be allocated adequate budgetary grants expeditiously so that plant, machinery and facilities of MIDHANI could be upgraded and modernised to save strategic products from being jeopardised.

6.14 The Committee note that the Indian Army and other Para Military Forces are using heavier jackets weighing more than 9 kgs which are being manufactured by MIDHANI. The Committee are given to understand that light weighted imported bullet proof jackets are being demanded by the Indian Army and other Para Military Forces and MIDHANI has not been able to produce that quality of LWBPJ. Therefore, the Committee desire that MIDHANI should collaborate with the foreign manufacturer for making light weight BPJs, so that our forces could increase their work efficiency by getting lighter BPJs and country can become self reliant in this field also.

CHAPTER VII

GOA SHIPYARD LIMITED

7.1 Goa Shipyard Limited (GSL), is the largest enterprise in the State of Goa employing about 1700 people. The shipyard covers an area of about one lakh square meters and was originally established by the Portuguese as a small barge repair facility in 1957, under the name "Estaleiros Navais De Goa". Following the liberation of Goa in end of 1961 this yard was leased to Mazagon Dock till October, 1967, when it was renamed as Goa Shipyard Limited. The paid up capital of the Company stands at Rs. 19.40 crore. Government of India accorded status of Schedule 'B' to the Company w.e.f. 30th January, 1997.

7.2 Giving details of product range of shipyard, the Ministry stated:

"Goa Shipyard Limited has build and delivered 175 ships for various customers in Government and private sectors including a small number of export orders. GSL can design and build modern, medium size, special purpose vessels upto 1105 metres in length 3000 tonnes displacement and 4.5 metres draught. The product range of the shipyard includes Fast Patrol Vessels, Survey Vessels, Sail Training Ships, Missile Crafts, Offshore Patrol Vessels, Pollution Control Vessels, Damage, Landing Crafts and Extra Fast Attack Crafts to the Defence Sector and Passenger Vessels, Tug Boats, Barges, Pontons & Fishing Vessels for the Civil Sector. In addition, GSL also undertakes construction of training simulators for Indian Navy and ONGC. The ship repair capability of GSL includes repairs of large vessels upto 105 mtrs. long, 2000 DWT and 4.5 mtrs draught."

Order Book Position

7.3 When asked about the Order Book Position of GSL by the Committee, the Ministry furnished the same as follows:

Sl.No.	Project	Nos.	Value (Rs. in crore)	Expected dated of delivery
1.	5th AOPV for Coast Guard	01	228.14	August, 2007
2.	Extra Fast Patrol Vessels of Coast Guard	05	222.85	First two ships to be delivered in March and June 2006 respectively
3.	Survival at Sea Training Facility for ONGC	01		March, 2005

Sl.No.	Vessel Type	Qty	Customer	Value of each (Rs. Crore)	Total contract value (Rs. In crore)
1.	Advanced Offshore Patrol Vessel	1	Coast Guard	199.00	199.00
2.	Extra Fast Patrol Vessel	5	Coast Guard	38.85	194.25
3.	Offshore Patrol Vessel	3	Indian Navy	361.15	1084.46
Total					1477.71

Capacity Utilisation

7.4 As regards the capacity utilization of GSL, the Ministry stated that the capacity utilization in the last three financial years in GSL was as follows:

Year	Capacity Utilisation
2001-2002	91.01%
2002-2003	41.34%
2003-2004	30.31%

7.5 On the specific question asked about steps taken by GSL for their optimum capacity utilization, the Ministry replied as under:

“As adequate orders have now been received, more resources, manpower and facilities would be utilized to enhance capacity utilization.”

As regard the steps taken by the Ministry to ensure regular orders to GSL to avoid gross under utilization of its capacity in future, the Ministry has replied as under:

“Goa Shipyard Limited would be considered for construction of small and medium vessels that are required for Indian Navy and Coast Guard. This has been reflected in the 10th and 11th acquisition plans of Indian Navy and Coast Guard.”

Perspective Plan

7.6 The Ministry was asked to furnish details of perspective plan envisaged by the Ministry with a view to improve construction period of vessels as well as improvement in productivity. The Ministry stated:

“The Perspective Plan envisages a progressive increase in VOP as percentage of capital employed and a progressive increase in the value added per employee. Modernisation and upgradation have been planned with a view to improve in construction period of vessels by 17 to 20% by the end of the Tenth Plan period as well improvement in productivity by 5 to 7% by the 10th Plan.”

7.7 The Ministry further stated:

“GSL has planned to enhance the share of outsourcing from 23% to 47%. It has formed a separate Outsourcing Cell to bolster the outsourcing activities. GSL has undertaken upgradation and modernization of its facilities, so as to curtail the build period and become competitive.”

7.8 The Committee asked the Ministry as to how outsourcing will help in faster production rate and whether build period of the vessels is competitive with the time (period) taken in other advanced countries, the Ministry stated:

“Outsourcing is resorted to when in-house capacity is inadequate to meet the agreed delivery schedules as also for economic reasons. Additional human resources provided by contractors would supplement the available work force and thereby expedite the vessel completion at lower cost.

The build periods of GSL are presently not comparable with the build periods of foreign shipyards. With a view to achieve major improvements in this aspect, various steps have been taken including modernization/upgradation of infrastructure facilities, adoption of infrastructure technology systems etc.”

7.9 During the oral evidence, the Committee wanted to know the collaboration of GSL with private industry, the CMD, GSL informed the Committee:

“..... 65 percent of our ships are actually outsourced to private parties and more than 90 percent of what goes into a defence sector is actually done by the private sector.”

Research & Development

7.10 The Committee enquired about the investment in R&D by GSL, the Ministry stated:

“GSL has not incurred any specific expenditure on R&D, however, improvements in design of equipment are effected through vendors while carrying technical negotiations with the suppliers and ordering equipment. At the same time, recently GSL have designed and developed a new configuration for Naval OPVs which was successfully model tested at Maritime Research Institute (MARIN), Netherlands. The cost of this will get reflected in the year 2005-06.”

During the oral evidence, when asked by the Committee about selection of designs, CMD, GSL stated:

“..... we select a design, we do not have any design ourselves..... Navy does not select design. The shipyard will go round looking for designs.”

Modernisation/Up-Gradation

7.11 When the Committee desired to know the modernisation/upgradation programme of the GSL, the Ministry submitted:

“GSL has started modernization and upgradation process by upgrading the state-of-the-art design software TRIBON and associated hardware, which is being used for CAD. In the area of information technology, GSL has put in place the ERP system-BaaN customized to the yard requirement. This initiative integrated with Peimavera project management tool, is expected to improving the overall efficiency and productivity of the yard. GSL also has a modern steel preparation shop with computer controlled plasma and flame cutting machine, automatic shot blasting equipment & processor controlled bending machine. A modern electronic workshop has also been established providing an in-house facility for testing instruments and electronic equipment. The existing pipe shop has been updated with several modern machines to improve pipe working capacity. In the area of welding technology, several latest equipment and production multipliers are being added to improve the quality and productivity.

GSL has plans to modernize the existing infrastructure and facilities to meet future challenges The plan involves major funds outlay

and are based on likely Naval and Coast Guard acquisition during 10th to 12th Five Year Plan period for high technology ships such as Mine Counter Measure Vessels, Air Cushion Vessels and Offshore Patrol Vessels. The modernization plans also take into consideration the fact that the facility so created should also help enhance capacity and capability of series construction of ships of the present product range. The implementation of modernization is largely planned through project funding.”

7.12 When the Committee asked about the various activities of the GSL with a view to modernize/upgrade state of art, design sale-wise TRIBON etc., the Ministry replied:—

“In foreseeable future, GSL is expected to receive orders from Indian Navy and Coast Guard for series construction of ships *i.e.* Offshore Patrol Vessels (OPVs), Fast Patrol Vessels (FPVs), Extra Fast Attack Crafts (XFACs), Survey Vessels (SVs) and Sail Training Ships (STSs). The yard has also been earmarked for the indigenous construction of Mine Counter Measure Vessels (MCMVs) for the Indian Navy. With greater emphasis being laid on Navy and Coast Guard to modernize their forces, GSL has to gear itself to meet the challenge of constructing high-tech vessels with international quality, at competitive prices and at shorter duration.

This is planned to be achieved through modernization aimed at creating new infrastructural facilities, augmenting or upgrading our existing facilities, infusing new technology and processes. This will also remove the present infrastructural bottlenecks.”

7.13 As regards the Master Plan for modernisation, the Ministry further stated:—

“Studying the existing facilities and activities of Goa Shipyard *vis-a-vis* the existing Master Plan and to prepare new revised Master Plan based on business objectives projected by GSL and likely facilities envisaged by the yard are as under:

- (a) Setting up of a modular construction shop with associated services at an appropriate place in the yard.
- (b) Creating a marine outfit centre integrated with existing Hull Outfit Shop.
- (c) Setting up of a dedicated shipbuilding complex for GRP hull Mine Counter Measure Vessels (MCMVs).

- (d) Shiplift system with adjoining hard stand and docking jetty arm for shipbuilding and ship repair.
- (e) Augmentation of outfitting capabilities for shipbuilding including augmentation of jetty and its facilities.
- (f) Setting up of modern storage facility in the yard.
- (g) Augmentation of carnage and material handling facilities with consideration of block transportation system.
- (h) Augmentation of Slipway No. 1, 2, 3 and 4
- (i) Study and upgradation of ancillary services."

7.14 For preparation of Master Plan and for implementation of phase of modernisation projects, the Ministry has appointed an international consultant, details of which furnished by the Ministry, are as under:—

"To achieve the above objectives GSL has appointed M/s Haskoning Nederlands B.V. (M/s Royal Haskonings group), an international consultants of repute as consultants for preparation of Master Plan followed by preparation of Preliminary Project Report and Detailed Project Report. The consultants will also provide supervisory services for the implementation phase of the modernization project. The agreement for consultancy services was signed with the firm on 22.4.2005. The time frame envisaged for preparatory services is 84 weeks followed by implementation phase of 30 months. Consultancy work has already been commenced by the firm and at present the draft master plan concepts are being developed. Master Plan and Preliminary Project Report (PPR) are expected be ready by the end of July, 2005."

7.15 During the oral evidence, CMD, GSL, has thus informed the Committee on the state of modernization and on the total cost:

".....our modernization which we hope to commence in full earnest by February, 2006.....Rs. 241 crore is the current production..... we will meet this out of our own finances."

Exports

7.16 When the Committee desired to know the efforts made by the Ministry for export of ships, the Ministry replied as under:—

"The Goa Shipyard Limited (GSL) have been making efforts to design, build and export ships. In order to propagate indigenous

shipbuilding capability, GSL along with MDL and GRSE participates in various defence exhibitions throughout the world. Concerted marketing efforts are in hand to target orders for Patrol Vessels from countries like Tanzania, Kenya, Mozambique, Sri Lanka, Maldives etc.”

7.17 From the material furnished, it is seen that exports of GSL during the year 1999-00, 2000-01, 2001-02, 2002-03 and 2003-04 was ‘NIL’. When enquired, the Ministry stated as under:—

“Since 1999, GSL has submitted the following offers to various countries and gave presentation and had technical discussion at appropriate levels regarding the same.

- | | | |
|----------------|---|---|
| (a) Sri Lanka | — | Techno-Commercial offer of Advanced Offshore Patrol Vessel (AOPV) |
| (b) Mauritius | — | Techno-Commercial offer of Advanced Offshore Patrol Vessel (AOPV) |
| (c) Mozambique | — | Techno-Commercial offer of Fast Patrol Vessel (FPV) |
| (d) Tanzania | — | Techno-Commercial offer of Fast Patrol Vessel (FPV) |
| (e) Maldives | — | Techno-Commercial offer of Fast Patrol Vessel (FPV). |
| (f) Indonesia | — | Techno-Commercial offer of Fast Patrol Vessel (FPV) |
| (g) Kenya | — | Technical offer of Fast Patrol Vessel (FPV) |

Offers mentioned above at Sl. No. (a) to (e) were considered favourably by the customers, however, these could not materialise for want of financial assistance required by the country. Offers recently submitted to Indonesia & Kenya [Sl. No. (f) & (g)] are under active consideration and are being followed up aggressively by GSL.”

7.18 On being asked about the concrete steps taken or proposed to be taken by the Ministry to materialise export orders for GSL, the Ministry informed:—

“For materialisation of the export of specialised class of vessels, aggressive support of High Commission Office is considered

essential to push the product at Government level. Further Government can consider to extend the soft loan facility to these countries so that export orders can materialise expeditiously.

Goa Shipyard Limited (GSL) is encouraged to participate in international defence expositions to show-case its products and abilities. GSL as on date has sufficient orders to fully book its production capacity. Export avenues are being constantly explored and financing option are also being considered for export orders. An inter Ministerial Committee has also been framed for fast track clearance of export proposals.”

7.19 When asked about the possibility to provide soft loan/credit facilities to the buyers as other competitors do, the Ministry replied as under:—

“A decision on providing an Indian line of credit to selected countries is taken by the Ministry of External Affairs based on geo-political requirements and availability of funds. Possibility of funding through international agencies, as well as banking agencies, are being explored by the shipyards. The approximate cost of the vessels targeted for export, range for Rs. 50 to Rs. 200 crore.”

7.20 During their oral evidence on the issue of soft loans, CMD, GSL stated:

“It was all done with the Govt. approval. As was pointed out by CMD, MDL, the main thing is that they want soft finance..... we have gone through the banks PNB and SBI are more than ready to provide money.”

7.21 The Committee note that the order book position of Goa Shipyard Limited is not healthy and there is constant shrinking of capacity utilisation, which has gone down from 91.01% in 2001-02 to 30.31% in 2003-04. To improve capacity utilisation, the Committee desire that the order for construction of small and medium vessels required by Navy and Coast Guard as reflected in 10th and 11th Acquisition Plan of Navy and Coast Guard, may be given to GSL. The Committee further desire that the Ministry should make it obligatory for each DPSU shipyard to constitute a Committee which besides examining the need for creating resources for healthy order book position, should also suggest ways and means for full and effective utilisation of the installed capacity and submit its report to the Government.

7.22 The Committee are constrained to note that GSL has not made any export during the last five years despite the keen interest shown by some countries on their products. As stated by the GSL, the main reason, therefore, was the non-availability of financial assistance to these countries for procurement of GSL ships. The Committee note that if soft finance is provided to these countries, the interest shown by the countries can materialise in orders. The Committee also note that two of our nationalised banks namely PNB and SBI are ready to provide soft loans. In view of long term advantage to Indian shipping industry in general and GSL in particular in terms of export of vessels, the Committee recommend that the Government should give necessary approval to the DPSUs to avail bank facility to extend soft loan to the importing countries. The Committee further desire that GSL should chalk out a clear cut plan to increase its export to fully book its production capacity.

7.23 The Committee are surprised to note that GSL has not incurred any expenditure on the important and vital area of R&D, which shows that it has not taken up any R&D initiative of its own and is relying on the designs supplied by vendors or depending on the obsolete designs. As R&D is the base of technology upgradation and modernisation of equipment and plant, the Committee strongly recommend that GSL must allocate substantial amount on R&D and should undertake selected R&D project in close coordination with DRDO and other Defence shipyards so as to upgrade and modernise their products. The Committee further desire that there must be a Research and Development centre in every defence shipyard especially in GSL with modern CAD/CAM facilities for constant improvement in present level of designing so that they can compete with the best in the world.

7.24 The Committee note that GSL is taking various steps to modernise its facilities with an investment of Rs. 241 crore, which is to be arranged internally during the 10th and 12th Five Year Plan period for high technology ships. The Committee hope that concerted and timely action will be taken by the GSL to implement its modernisation and upgradation plan in order to generate its internal resources for the purpose. The Committee are of the opinion that besides special modernisation plan there is a need to put concerted efforts by GSL to make modernisation activities as a part of the annual budgetary exercise of the company.

CHAPTER VIII

GARDEN REACH SHIPBUILDERS & ENGINEERS LTD

8.1 Garden Reach Shipbuilders & Engineers Limited (GRSE), was established in 1884 as a small ship repair workshop. In 1934, it was converted into a Limited Liability company, as Garden Reach Workshop was spread over 20 hectares with a river frontage of about a kilometer therefore, shipbuilding activity was not undertaken as part of the policy of British Industrial interest. Realising the potential of this industry, the Company was taken over by the Government of India in early 1960. Shipbuilding activity formally started in the Company after nationalization. Thereafter, the company diversified into engineering activities. Presently GRSE has 8 units in and around Kolkata, and a Diesel Engine Plant at Ranchi, Jharkhand.

The division-wise product range of GRSE is as under:

Products	Division	No. of Units	Location
Ship building & Ship repairs for Navy and Coast Guard	Ship	2	1. Ship building at main workshop, Kolkata. 2. Fitting Out Jetty at Netaji Subhash Dock Extension, Kolkata.
Shipborne equipment, Bailey type Bridges and Technology structure and equipment including Turnkey Projects	Engineering Division	4	1. 61, Park Unit at Garden Reach Road, Kolkata. 2. Belur Unit, Dharam Tala, Howrah. 3. Baranagar Unit (TTC), Rabindra Nath Tagore Road, Kolkata. 4. Taratola Unit, Deck Machinery, Kolkata.
Diesel and Gas Engines	Engine Division	1	Ranchi, Jharkhand.

8.2 Fabrication jobs reduced since most of the ships were under fitting out stage.

When the Committee asked the reasons for lack of orders as stated for Shipbuilding and Engineering division, the Ministry replied as under:

“GRSE under the Ministry of Defence builds warships and other vessels to cater the country’s defence requirement and other maritime activities. The Defence Shipyards are, therefore, captive PSUs’, primarily meeting the shipbuilding requirements of the Indian Navy & Coast Guard. The performance of GRSE is further intricately linked with the Perspective Plan of the Indian Navy & Coast Guard for construction/acquisition of their warships/patrol vessels. Pending finalisation of the Perspective Plan, nomination of ships for construction and its consequent placement of order on Shipyards is delayed. As on date GRSE has received orders for 3 LST (1) and 4 Fast Attack Crafts which are low value non-weapon intensive ships. Order for 4 Anti Submarine Warships (Corvettes) has also been received but its production could not be started due to delay in availability of ABA Quality Steel.”

8.3 During the oral evidence CMD, GRSE has also stated:

“If no order comes other than what is stated here, we will be under loaded. We have appealed to the Ministry, and to the Defence Minister to increase our orders. The Ministry deliberately developed us as a second frigate line. We need to get orders for frigates.”

When the Committee asked the specific reasons for not placing any new shipbuilding orders during the period 1996 to 2002, the Ministry further informed as under:

“Acquisition of ships by the Navy is in accordance with its long term plan and subject to availability of funds. Navy did not acquire any ships in GRSE’s range of production during this period due to constraint of funds.”

The Committee asked the Ministry to explain the reason behind the massive under-utilisation of capacity in shipbuilding and engine division of GRSE and capacity utilization of Engine Division which was 93 percent in 2001-02 but declined to 22 percent in 2002-03. The Ministry in its reply stated as under:

“The Capacity Utilisation in Shipbuilding is assessed on the basis of steel through put compared with its installed capacity. Further, the steel through put is planned depending on the volume of order in hand. It may be noted that during the period 1996 to

2002 GRSE did not receive any new shipbuilding order. The hull construction activity gradually declined till receipt of steel in June, 2003 for commencement of three new LST (L) orders received in December, 2001. The installed capacity of GRSE was assessed as 5400 Eq.MT based on plain type of construction as existing in commercial ships with thick steel plates in use. Presently, GRSE manufactures warships whose thickness of steel plates are much less and qualitative requirements very stringent, having higher shock & vibration standards and critical shape factor. As such, the existing norms of capacity utilization assessment do not reflect the true picture based on the present product range, the installed capacity has been reassessed as 3650 Eq.MT and accordingly the capacity utilization for the last 3 years is given below:

Year	Steel through put achieved in Eq.MT	Capacity Utilisation		Remarks
		based on 5400 Eq. MT	based on 3650 Eq. MT	
2002-03	2066*	38%	57%	Shortage of work load.
2003-04	3043*	56%	83%	
2004-05	2948	54%	81%	

*Including 180T, 238T & 44T of Gen. Engg. (NTPC & Bailey Bridges) work were produced by Ship Division Structural Shop at Main.

Modernisation/Upgradation

8.4 As regard the modernisation and upgradation of the GRSE, the Ministry stated:

“In order to meet the customers’ requirement of quick delivery and adherence to schedule, GRSE, has started upgradation and modernization of its infrastructure facilities in respect of Block Fabrication, Block Erection, and Pre-outfitting fitting. M/s Gifford, UK has been engaged for consultancy in respect of modernization. The Consultant has submitted his Preliminary Project Report.

GRSE’s modernization programme is linked with construction of ASW Corvette Project for the Indian Navy and the cost involved is

being provided by the Navy through this project. The facilities to be created and the cost involved are:

Cost Estimates Facilities	(Rs. in crore)
Hull Shop-II Modernisation	42.00
Slipway No. 4 Modernisation	90.00
Modular Construction Workshop	50.00
Total	182.00

The Company has upgraded the production facility by introducing CNC Plate Cutting Machine with Plasma Head Attachment, CNC Pipe Bending Machine, CNC Lathe etc. in different shops. Semi-automatic and automatic and TIG/MIG Welding Machines are extensively provided in Structural Shops. Use of Ceramic Back Strip for welding has improved the production process. ERP System has been introduced with on line connection between design, planning, procurement and production. Prima Vera Software and Tribon Software has been installed in Planning & Design Department for upgrading of activities.”

8.5 The Ministry was asked to state the modernization programmes taken from time to time to upgrade the technology to bring it at par with modern times. The Ministry stated as under:

“To meet the customers expectation of faster delivery, GRSE has embarked on a Modernisation Plan to reduce the build period wherein Rs. 90 crore would be spent from Internal Accruals for upgradation of Technology & Production Aids and Rs. 180 crore for Infrastructure Development. The modernization plan has since been approved and is in progress in phases. Details of initiatives taken are enumerated below:

Technology Upgradation

Augmenting existing design capabilities with procurement of additional licensed softwares for generation of faster

- Production Drawings
- Plate Cutting & Pipe Bending details
- Equipment & Composite Modelling etc.

2. Integrating Design, Planning & Production through an ERP System (SAP Software).
3. Project Planning & Monitoring through Prima Vera Software.
4. Production Automation.
 - Procurement of modern Welding Machines
 - CNC Plate Cutting Machines
 - CNC Pipe Bending Machines

Phase-I Infrastructure Development

- Augmentation of Block Handling Capacity to 65 Ton in shop floors.
- Increasing Building Berth capacity to 2500 Ton
- Construction of New Store

Phase-II-Yard Modernisation

The second phase of Yard Modernisation envisages Enhancement of Block Fabrication Capacity from 540 Eq. TPA to 1170 Eq. TPA at Shop floor level. Towards accomplishment of the aim a Modern Hull Shop II with a floor area of 8512 Sq.M and Crane capacity of 65 Ton to 70 Ton have been progressed in two phases at an estimated cost of Rs. 41 Crore. Phase-I has been completed and Phase-II is expected to be completed in July, 2005.

Phase-III-Yard Modernisation

The third phase envisages-

- (a) Enhancement of Block erection capacity on slipway. The existing Slipway No. 4 to be replaced by a suitable launching system to enable higher launching capacity from the present 900T to 3000T and higher ship length from existing 90M to 120M.
- (b) Construction of Module Shop at a cost of Rs. 50 crore for enhancing the pre-outfit activities from 25-30% to 60-80%.

To progress Phase-III of the modernization, GRSE with the approval of the Board engaged a Global Consultant M/s Gifford Associates, U.K. Detailed Project Report has since been submitted and approved by the Board on 11 January, 2005. For effective utilization of the

modernization facilities for the ASWI the Consultant included certain added features which were not envisaged at the conceptual stage. This has resulted in increase in the modernization estimates to Rs. 419 Crore from Rs. 270 Crore. The modalities for funding the project are worked out in consultation with Navy and Ministry of Defence.

On completion of modernization plan, GRSE will be able to bring down the total production time of Warships as shown below:

Type of Ship	Present build period in years	Revised expected build period in years
Frigates	09	05
Corvettes	06	04
FACs	03	02
LST(L)s	07	03

Research and Development

8.6 It is seen from the material furnished by the Ministry that there has been negligible expenditure on R&D for the last five years, one being asked about the reasons therefore, the Ministry has replied as under:

“GRSE has 3 Division-Ship, Engineering & Engine Division—each contributing 86%, 11% & 4% in terms of the Annual Value of Production (VOP). In respect of Ship Division the R&D activities are progressed by the R&D Wing/Units of the Customers i.e. Indian Navy & Coast Guard. Efforts made towards upgradation of the products are listed below division-wise:

A. Ship Division

Modern trend in Warship design such stealth features and low self noise generation are being incorporated in the new Anti Submarine Warship (Corvette), in consultation with the Indian Navy. Various inputs which are required to achieve these parameters are provided by the Indian Navy or from the agencies nominated by them.

The ASWI Project 28, is totally a new design ship being built in GRSE for the first time. All R&D aspects to improve upon the performance are incorporated at the design stage itself.

B. Engineering Division

For upgradation and new design of the Bailey Bridges the following efforts have been made:

- (a) Conversion of timber decking to steel decking.
- (b) Design, fabrication and testing double-lane bridges.
- (c) Designing of large size panel bridge in consultation with IIT, Kharagpur considering the following aspects:
 - (i) Longer Span
 - (ii) Higher Load Class for given Span.
 - (iii) Lower configuration for given Load Class and given Span.
 - (iv) Reducing the number of components as well as reduction in weight.
 - (v) Galvanizing of components to enhance the lift Span.
 - (vi) Simplify design for easy fabrication and assembly at site by unskilled labours.

Further, GRSE is also in dialogue with Mabey & Johnson, UK for manufacturing of portable steel bridges under transfer of technology.

Engine Division

The manufacture of Marine Engines being in collaboration with MTU Germany, the R&D activities are restricted. Notwithstanding the same, the Diesel Engine Plant is progressing re-engineering of Ajay Class Ships with MTU 1163 series Engines. The feasibility report has been submitted and accepted by the Indian Navy."

Exports

8.7 When the Committee desired to know the export position of the GRSE, the Ministry submitted:

"The products offered by GRSE for exports range from Ships (Warships and Auxiliary Ships) and Ship Board equipment to Bailey Bridges & Components and Pumps for the Agro Sector. The countries targeted are South East Asian countries, SAARC Countries other than Pakistan, the Middle East Asia and certain African

countries. The Company has made deemed export of Rs. 1.90 crore during the year 2003-04 in respect of supply of equipment of NTPC Talcher Coal Handling Plan Project.

The following steps have been taken by the company in the recent past to promote exports:

- (a) The Company regularly participates in International Defence Exhibitions organized by different agencies in India and abroad. The three Defence Shipyards together had put up an "Indian Defence Shipyards" pavilion at the recently held DEFEXPO India 2004 at Pragati Maidan, New Delhi. During the Financial Year 2004-2005, they have participated in Africa Aerospace and Defence 2004 at South Africa as part of the Integrated India Pavilion, which was coordinated by the Defence Exhibition Organisation.
- (b) The Company maintains constant liaison without Defence Attaches in target countries and various business houses abroad, for obtaining information on various demands arising in these countries.
- (c) They have, along with the other shipyards under the Ministry of Defence, appointed "RITES" as their agent for promoting their business abroad. GRSE have also appointed M/s Shaheen Al-Jazera General trading and contracting company, Kuwait as agent to promote their business in Kuwait."

Perspective Plan

8.8 The Draft Perspective Plan of GRSE envisages investments for upgradation of facilities and modernization of infrastructure to enhance its productivity. Due emphasis is laid down also on export, indigenisation, diversification and optimum utilisation of manpower. As the Perspective Plan of the Shipyards is largely dependant on the Shipbuilding Plan of the Indian Navy and Coast Guards, the Defence Shipyards have been asked to recast their Perspective Plan and bring it in consonance with the 10 year Shipbuilding Plan of the Indian Navy. This exercise is under way. In the meantime, the shipyards have also been asked to formulate their Corporate Strategy independent of the orders expected from the Services and their Perspective Plans.

8.9 The Committee desired to know the specific steps taken by GRSE in its perspective plan to boost export, increase the content of

indigenisation, diversification and optimum utilization of available facilities and manpower. The Ministry replied as under:

“To sustain and achieve a steady growth in the present liberalized environment a ‘Corporate Plan’ is under preparation by M/s Price Waterhouse Coopers Pvt. Ltd. up to the 11th Plan period *i.e.* 2012 with the following SORs:

- (a) Consolidating GRSE strengths in its core competence areas.
- (b) Identification of possible areas for diversification, merger & acquisition which are generally within the basic expertise and related fields.
- (c) Modernisation of infrastructure facilities dovetailing the ongoing modernization activities and ensuring optimum capacity utilization of existing facilities to meet the customers’ requirement of quicker delivery.
- (d) Rationalisation and restructuring the human resources for optimum utilization.
- (e) Explore the export market and assess the export possibilities of GRSE products and means to succeed.

The Draft Report has since been received and under scrutiny.”

Constraints

8.10 In a note to the Committee, the Ministry explained the following constraints in improving the performance:

- (a) “Unreliable Dry Dock availability from Kolkata Port Trust.
- (b) Limited sources for quality castings and forgings required for manufacture of ship borne equipment and engineering products.
- (c) The average age of workforce is around 54 years.
- (d) Delay in supply and poor quality of material received from indigenous suppliers.
- (e) Limited scope of expansion and restricted approach road to main yard due to its geographical location.

- (f) Low draft of the river poses problem in building bigger size vessels.

The decay of Kolkata port and situation of river Hooghly pose problems for the future of this shipyard which may have to be shifted to an alternate location.”

8.11 When the Committee asked the Ministry on steps taken to remove the above constraints, the Ministry replied as under:

“In order to overcome the refit constrains due to non-availability of Dry Dock facilities. Chairman & Managing Director, GRSE proposed that Kolkata Port Trust (KPT)) and GRSE join hands together to form a joint venture for undertaking repairs of ships in the Eastern Region. Secretary (Shipping), Ministry of Shipping & Transport, desired that a group consisting of KPT, SCI & GRSE look into the matter and submit a report. Consequent discussions with the Senior Management of KPT, it was decided that a Draft MOU will be prepared by GRSE which will be discussed between the two parties and a final draft will be prepared. The final draft will be put up by the parties to their respective Boards for approval.”

8.12 The Committee note that there has been underutilisation of capacity of Garden Reach Shipbuilders and Engineers Limited (GRSE) since 2001-2002 due to shortage of workload. The Committee are given to understand that the Navy did not acquire any ships in GRSE's range of production during this period. The Committee further note that there has been a negligible R&D expenditure by GRSE during the last five years. As regards the modernisation and upgradation of the GRSE, the Committee note that phase I of the modernisation of project has already been completed, phase II was expected to be completed by July 2005 and about phase III, the detailed project report has since been submitted by the consultant from UK with certain added features and the same is to be approved by the Board before its finalisation. The Committee are informed that on completion of modernisation plan, GRSE will be able to drastically bring down the total production time of warships, which in turn will help to obtain optimum capacity utilisation of existing infrastructure and available manpower. The Committee, therefore, strongly recommend that Ministry should make all concerted efforts to finalise and implement the modernisation plan in a time bound manner without further showing time and cost overrun so that intended benefits could be availed by the company.

The Committee also desire that the Indian Navy and Coast Guard should prepare and give their actual shipbuilding requirements to the GRSE, so that it may also prepare its perspective plan accordingly and available capacity and manpower may not go underutilised. As regards the constraints being faced by GRSE, the Committee desire the Ministry to take initiative for signing and finalisation of MoU between the GRSE and Kolkata Port Trust (KPT) so that its refit constraints due to non availability of dry dock facilities, could be resolved.

CHAPTER IX

MAZAGON DOCK LIMITED

9.1 Mazagon Dock Limited (MDL), was taken over as a Public Sector Undertaking under the Administrative control of the Ministry of Defence, Department of Defence Production and Supplies in May 1960 prior to which it was a Joint Stock Company owned by P&O Steam Navigation Company and BI Steam Navigation Company. At the time of take-over, the company was mainly a ship repair yard. The yard has been expanded to build warships of 6500 tonne displacement and merchant ships upto 27000 DWT. The Company has also diversified into the manufacture and installation of offshore platforms for ONGC for exploration of Oil. For this purpose, three additional production units were established, one at Alcock Yard in Mumbai adjacent to the main yard, another at Nhava and a third at Mangalore during the period 1977-1985.

9.2 In 1980, it was decided that construction of submarines for the Navy will be carried out at Mazagon Dock Ltd. A dedicated Yard for submarine construction was, therefore, built during the period 1982-88. The yard has significantly served import substitution.

9.3 Since its take-over, the company has built and delivered to the Indian Navy 6 Leander Class Frigates, 3 Godavari Class Frigates, 3 Missile Corvettes, 4 Missile Boats, 1 Cadet Training Ship, 2 Submarines and 3 Destroyers. The company has also built 7 Offshore Patrol Vessels for the Indian Coast Guard. It is the 'Lead Shipyard' and is entrusted with the construction of 'First of Class' ships. The company has also built Cargo and Passenger Ships, Supply Vessels, Diving Support Ship, Dredgers, Tugs, Tankers, Barges and several other ships for a number of customers in India as well as abroad. In the offshore business, MDL has fabricated and delivered 65 Well Head Platforms, 3 Process Platforms, 2 Jack-up Rigs and coated 903 Kms. and laid 586 Kms. of sub-sea pipelines for ONGCL. About 50 percent of the offshore platforms installed in the Bombay High, have been build by MDL. The paid up capital of the Company stands at Rs. 199.20 crore. The shipyard has been upgraded to Schedule 'A' on 5th January, 2000.

Product Range

9.4 The activities of the Company may be classified into:

- (a) Ship building
- (b) Ship repair and
- (c) Construction of off-shore platforms

Shipbuilding is undertaken at the North Yard and South Yard. Submarines are built in the East Yard.

Defence Sector Products

Destroyers, Frigates, Corvettes, Missile Boats, Cadets Training Ship, Offshore Patrol Vessel and Submarines.

Civil Production

- (a) Cargo Ships, Coasters, Passenger-cum-Cargo Ships, Tankers, Offshore Supply Vessels, Dredgers, Tugs, Cargo Barges, Floating Cranes, Sail Training Ships, Fishing Trawlers, Barges, Pontoons & Launches, Multi Purpose Support Vessels, Diving Support Vessels.
- (b) Surface Shipbuilding production, Ship repair and General Engineering activities are carried out in the North Yard & South Yard.
 - I. Offshore fabrication is done at Alcock Yard and Nhava Yard consists of:
 - Fabrication of Wellhead Platforms, Process Platforms, Jack-up Rigs.
 - Modifications and repairs to Offshore structures.
 - Transportation, Installation and laying of subsea pipelines.

Capacity Utilisation

9.5 As regards the capacity utilisation of shipbuilding in MDL in the last three years, the information furnished by the Ministry is as under:

Year	Capacity Utilisation
2001-2002	26.92%
2002-2003	33.19%
2003-2004	71.00%

The above figures are related to shipbuilding. As regards the capacity utilisation of submarines, the Ministry stated that the submarine facilities are presently lying idle due to lack of orders.

When the Committee asked the reasons for low Order Book position and the proposal of the Government to address this problem for optimal utilization of the capacity, the Ministry replied:

“Low Order Book position during the years 2000-01 to 2002-03 was due to delay in placement of orders for P17 and P15A ships. As regards Merchant Ship building is concerned the current trend is to procure large vessels of over 30,000 DWT capacity and hence MDL has not been in a position to participate in tenders for such requirement due to its infrastructure limitations. MDL has not been in a position to furnish competitive offer in comparison to other private Shipyards/Foreign Yards, for medium and small vessels due to (a) their low labour input cost and overheads (b) incidents of Octroi Duty on inputs which is applicable for Mumbai Municipal Corporation (c) confirmed availability of subsidy at the time of quotation for export orders (as per the present subsidy scheme, the subsidy applicable can be applied on receipt of order by the Shipyard and will be granted subject to availability of funds and valuation of price in case of non tender orders). MDL will be able to improve on productivity and competitiveness gradually after the modernization project such as Modular Shop, additional Wet Basin, Heavy Lift Crane etc. are completed. Hence, it is necessary to place orders for P17A early so that similar situation of under-utilisation does not recur.”

9.6 The Committee asked the Ministry to state the reasons for ‘Nil’ order position of Heavy Engineering Division of MDL. The Ministry has replied as under:

“The Heavy Engineering Division business includes work related to fabrication of jackets and platforms for offshore projects of ONGC and includes also the repairs/modifications to existing structures at Bombay High. The Division’s product range also includes items such as Pressure Vessels of various sizes and types required by Industries such as Refineries, Fertiliser & Chemical Plants, Power Stations, etc. besides other heavy fabrication work related project.

As far as offshore work for the ONGC is concerned, MDL is at a disadvantage as it has no marine spread assets (such as specialized

barges, support vessels, floating cranes, etc.) which consequently limits MDL's role in this field to that of only an onshore fabricator of jackets/platforms. To obtain orders for such work, MDL has to offer its services as a fabrication sub-contractor to one or more of the main bidders for the concerned ONGC tenders which are all of the turn-key variety and further, MDL has to enter into a pre-bid agreement with the main bidder(s) for that purpose. Only if that main bidder wins that contract, can MDL expect to obtain the fabrication order as a sub-contractor. As per ONGC's current stipulation, MDL cannot qualify as a main bidder. MDL has been following this line of action for quote some time now.

Of late, ONGC's orders for such offshore new projects have also started to dwindle but MDL is continuing to pursue the above strategy as briefly enunciated above to try and obtain fabrication orders for jackets/platforms through main bidders such as L&T and EIL. Insofar as non-ONGC work is concerned, the Heavy Engg. Division is continuing to try and obtain fabrication orders but without success so far, as there are established players in this field already."

9.7 During the evidence on being asked by the Committee about the submarine construction, the CMD, MDL stated:

"As regards the submarine construction, we have got it in 1992 and 1994. Two submarines were delivered. Since then, there is no order."

The Ministry was further asked by the Committee about the reasons for under utilisation of capacity of MDL. In its reply, the Ministry stated as under:

"The utilization of shipbuilding capacity in MDL has been 71.36% and 75.86% during 2003-04 and 2004-05. Three stealth frigates have already been launched and the first ship of P15A destroyer is getting ready for launching. The hull shops will be underutilized as the slipways will become vacant after the launch of P15A Ships. Placement of orders for follow-up of projects 17 and Project 15A is, therefore, very crucial for sustainability of MDL's capacity utilization.

The order book position of the Heavy Engineering division is Nil as on today. However Mazagon Dock Ltd. is in dialogue with various companies in order to work as their fabricators in cases of forthcoming orders from ONGC."

9.8 The Committee asked the Ministry on the investment made till date to build assembly line for submarines at Mazagaon Dock Ltd. and how far this investment has been utilized by way of getting returns thereon. The reply furnished by the Ministry is as under:

“The investment made in East Yard (Submarine construction yard) for creation of submarine construction was Rs. 49.34 Crore in 1984. The construction of the first and second submarines commenced in January 1984 and September 1984 respectively. Both these submarines were commissioned in February 1992 and May 1994 respectively. Subsequently East Yard also constructed one Missile Boat P 1241 RE from May 1990 to December 1994. EY facility was idle from January 1995 to June 1998 and since then mid-life refit cum modernization of two SSK submarines were undertaken at EY. However, the dedicated assembly line for construction of submarines has been idle since commissioning of second submarine, as follow-up order to continue new construction of Submarines has not been placed by the Navy.”

9.9 The Committee further asked the reasons for non-placement of orders with MDL and responsibility fixed for delay in processing the case for placing order for the submarines. The Ministry has stated as under:

“The proposal for the acquisition of submarines for the Indian Navy is presently under consideration of Government.”

The Committee when desired to know the specific reasons for non-utilisation of submarine building facilities and exploring possibilities for supplying indigenously made submarines to other countries, the Ministry replied as under:

“The specific reason for non-utilisation of submarine building facilities, insofar as MDL is concerned is that no submarine building order has been placed on MDL since 1993 till date. The last and the only submarine building order placed on MDL was in the 1980's for two submarines which have since been successfully executed and delivered to the Indian Navy in 1992 and 1994.

There is no indigenous design available with the country for construction of submarine.”

The Committee asked the reasons for failure of the Government to take a decision on the Navy's request to get submarines for them and

cost escalations due to delay in discussion. The Ministry replied:

“Government recognize the need to restart the submarine production line at MDL, Mumbai, for preserving skills relating to submarine building and for augmenting the strength of Naval submarine fleet. A proposal for indigenous construction of submarines is presently under consideration.”

9.10 When the Committee enquired about the shortage of submarines after 1994 and the status of acquisition of submarines, the Defence Secretary during oral evidence stated:

“It is correct to say that the Mazagon Dockyard did not manufacture submarines after 1994. In fact, it was doing the repairing and maintenance work of submarine. As far as the requirement of the Navy is concerned, talks are going on with the French companies. The aim even at that time was that it would be bought through technology transfer and the submarine will be built in our submarine manufacturing yard, that is Mazagon Docks.”

9.11 As regard the query of cost escalation due to delay in finalizing the submarine project, the Defence Secretary stated:

“There was a question of cost escalation because the negotiation were prolonging. So the Ministry of Defence again negotiated regarding limiting cost escalation and finally last week the Cabinet Committee on Security have cleared the submarine projects and India will manufacture Scorpene class submarine with French technology and French parts in the Mazagon Docks. So our Mazagon Dock capability will be restored.”

The Committee asked as to when the MDL's capacity was expected to be utilized with the current order position and what has been that latest position of getting further orders of Project 17 & 15A. The Ministry replied as under:

“MDL's capacity for shipbuilding needs to be viewed from 2 angles; one being from the angle of utilization of manpower and the second being from the angle of utilization of its basic infrastructure such as slipways and hull fabrication shops. With the current order position, MDL's capacity is expected to be by and large, fully utilized upto the year 2010 as far as manpower is concerned. However, as far as basic infrastructure is concerned, MDL's shipbuilding capacity would progressively remain unutilised

commencing end 2005 when the slipways would start falling vacant and the loading of the hull fabrication shops starts getting reduced. This is because both the P-17 & P-15A ships (total 6 in number) would have largely finished with their respective hull fabrication and launching requirements by then.

Three Project 17 class of ships presently under construction, are likely to be delivered between March 2007 and March 2008. Orders for three Project 15A ships have been placed on the yard. Their delivery class are likely to be between March 2009 to Sep. 2010."

Perspective Plan

9.12 As regards the Perspective Plan, the Ministry submitted as under:

"The Perspective Plan of MDL covering the Tenth and Eleventh Plan period from 2002-2003 to 2011-2012 has been prepared based on the shipbuilding and submarine construction projects expected to be assigned to MDL in light of the long term acquisition plan of the Indian Navy, in addition to existing orders in hand. However, in view of the uncertainty over the anticipated orders materializing as the Naval Plans are undergoing changes, the Company is in the process of formulating a Corporate plan upto 2012."

9.13 The Committee further asked details of the perspective plan prepared by MDL for 10th and 11th Plan periods and the percentage of funds utilization and physical achievements made so far. The Ministry replied as under:

"The perspective plan of MDL is based on Indian Navy's acquisition plan for the Tenth and Eleventh Plan periods. The plan is under preparation in consultation with Indian Navy. It is understood that orders for follow-on ships of P17 and P15 A are planned to be placed on MDL in the foreseeable future. The perspective plan of MDL will be finalized after firming of the Naval acquisition plan."

9.14 During the oral evidence on the orders to be obtained by MDL from Navy, CMD, MDL informed the Committee:

"It is the Indian Navy's acquisition plan for the XI, XII and the XIII Plans. For the MDL, they have earmarked 17 Alfa frigates, P75 etc. during the XI Plan."

Modernisation/Upgradation

9.15 When the Committee asked as to the efforts made by the Ministry for modernization/upgradation of the MDL, the Ministry replied as under:

“The Company’s 10 year modernization and capital investment plan has been approved by the Government. The Primary objective is to maximize productivity of existing capital assets by providing balancing equipments and judicious essential replacements. New generation plant and machinery is acquired where new product lines are taken up under diversification.”

The total capital outlay proposed is approximately Rs. 445 crore. Leasing of equipment and machinery is preferred. Internal generation will also help finance a part of the costs. The infrastructure to be developed are:

- (i) Modular workshop with EOT cranes
- (ii) Extension of slipway No. 2 in South Yard
- (iii) Additional West Basin with LL Cranes
- (iv) Cradle Assembly shop & stores for Submarines
- (v) Upgradation of Design Software
- (vi) Upgradation of Welding stations.

Creation of the above facilities is expected to be completed by early 2007.

9.16 During the oral evidence on the issue of modernisation, CMD, MDL further supplemented as under:

“This slide is just to show you those 11 blocks will be done. Each block will stand-alone and they will be integrated after the modernization is done. We will have a crane of 300 tonnes. Presently, our heaviest crane is 60 tonnes only. This is a crane which we are showing in the slide. This is the way in which they will be straddling along. These are the main ingredients of the modernization. Today, in fact, the stage is that we do not have wet basins. We are dependent on port trusts. We hire them for a particular time and then our manpower has to go in for work but security problems are there. All kinds of productivity losses are there. We have taken a very major initiative on outsourcing.

Total modernization package is around Rs. 417 crore including submarine projects, as well as, ships which we are doing. This will be valid for future ships also. As I said in one of my earlier slides that although money has been given to this shipyard but shipyard has not invested any money into modernization after 1994. That means there is no modernization at all. This is the way all those things are essential. "Otherwise, we will be stuck and built periods will be like as it used to be earlier."

9.17 On the issue of investment being made on the modernization of MDL, Shipyards, the CMD, MDL informed the Committee as under:

".....basically, coming 1994 onwards, we have not had any investments in modernization for the shipyards. In fact, there has been hardly any investment for upgradation and modernization....."

Exports

9.18 When the Committee desired to know the export order position of MDL, the Ministry replied as under:

"In spite of various measures such as market research and survey, appointment of agents, circulation of MDL product literature, participation in exhibitions, MDL has not been able to secure export orders in the recent past because of the following constraints:

- (a) Most foreign shipyards are being subsidized heavily by their respective governments.
- (b) Soft loans/credit facilities are available to buyers from foreign shipyards.

The Company, however, will continue with its efforts such as participating in International exhibitions and circulating its product literature, advertisement on Internet and in leading journals on shipbuilding, working closely with RITES for securing export and participating in global tenders.

CMD, MDL during the oral evidence informed the Committee—"today, one of the biggest hurdles is that all the countries, which are coming to us, want 'soft loan funding pattern'. They say that you may fund them. We have requested the Ministry, and they are very positively looking at it. Now, Sir, export is one of the key result areas."

9.19 The Ministry was asked by the Committee to comment on inability of MDL to secure any order for exports due to foreign Shipyards being heavily subsidized by their Governments and soft loans etc. offered by them to the buyers. The Ministry replied as under:

“MDL continues with efforts as enumerated below:

- Sourcing shipbuilding tenders from overseas clients through websites, high commissions & agents.
- Participating in International exhibitions and circulating product literature.
- Advertising on Internet and in leading journals of shipbuilding.
- Participation in global tenders.
- Inviting international dignitaries to MDL Yards for presentations on the Company’s capabilities.

While the scope for exporting warships awaits enlargement with availability of indigenous weapon systems, the company’s export efforts are aimed at a few types of Offshore Patrol and Auxiliary Vessels in the Defence sector and Dredgers & proven selected ferries in the Merchant-ship Sector.”

9.20 The Ministry further supplemented that the Indian Shipbuilding industry can become competitive internationally if the following steps are taken by the Government:

- Arrange to provide soft loans/credit facilities to the buyers similar to those provided by foreign shipyards, such as Title XI guarantees provided by the US Government.
- Provide working capital at low interest rates commensurate with the interest rates given in countries like Japan/Korea/USA for export *viz.* around 4%.
- Exemption of Plant & Machinery procured for shipbuilding, from Customs/Excise duties, as applicable to the Ship Repair industry.
- Where offers are to be made on deferred payment basis, the interest on export credits offered through financial institutions may be subsidized to the extent that the interest payable by the buyer is brought at par with that being charged in other countries.

- Exemption from Income Tax payable in respect of engineers/ specialists from original Equipment Manufactures (OEM's) deputed to the Shipyards for assisting with installation, STW (setting to work and commissioning of their products.)
- Exemption from levy on TOT and related activities.
- Rationalisation of taxation to enable the Shipyard to compete on a level playing field at both National and International levels."

9.21 The Committee asked the reasons for higher labour input cost and overheads in comparison to other shipyards and whether the issues of octroi duty and subsidy were taken up at appropriate level. The Ministry replied as under:

"The reasons for higher labour input cost are due to higher mandays expended in executing a given order as compared to other shipyards for the same class of ships. The higher mandays are primarily due to the peculiar trade structure of workmen at MDL due to historical reasons. MDL is currently in the process to convert the workmen into multi-skilled category and also to introduce work output norms. Both these initiatives have some linked monetary incentives as approved by the Board. It is expected that within the next year or so the mandays expended at MDL would favourably compare with those at other shipyards for similar work.

As regards octroi duty, etc. the recent promulgation of VAT would largely eliminate the adverse effects of high sales tax levies hitherto in force in Maharashtra. As regards octroi the ill effects would be felt on the cost of the civil ships. As regards subsidy for exports, a 30% subsidy on value of ship for export, irrespective of size, already exists."

9.22 The Committee asked the Ministry regarding steps being taken by the Government to make MDL competitive in international arena as also to improve the quality of the products offered by the Dock. The Ministry replied as under:

"MDL has been sourcing various tenders through Internet, Indian Mission Aboard and directly from customers. Membership of tenders information website is also taken to obtain information on International and national tenders. In order to make competitive offer proposal are made based on outsourcing of construction work

wherever feasible. Company also maintains accreditation to ISO 9000-2000 standard for quality assurance which is essential for export market.

MDL currently has plans for modernization of the infrastructure as part of Naval Project to facilitate reduction in build period and cost of Ships. This is being done by having longer slipways, heavier cranes, additional wet basin and modular construction shops in line with international.....”

9.23 During the oral evidence the Committee wanted to know the efforts being made by MDL for enhancing its area, the CMD, MDL informed the Committee:

“This slide shows the map of our Bombay Docks. If you see the slide, on the left-hand side is the Mumbai Port Trust. On the right-hand side is the Ship-breaking Yard of the Darukhana, as we have called. We are totally cocooned between them. As regards the draughts, we are stuck at 4.5 meters, and there is no scope for further expansion. Today, there is a definite need for deeper draughts if we are going to hit the global market. There is a need for ships of more than hundred thousand tonnes all around the shipping industry. We have capacity only for 126 thousand tonnes and not more than that. It is because of draught constraints, etc. Therefore, we are looking at the Green Field Site. As Mr. Chairman has asked, we are looking for a Green field site in Bombay, but I do not think there is any possibility of that. There has to be a very deep draught. There has to be a good availability of sea frontage. This exercise is going on in line with the Government’s policy of enabling capacities in the East Coast as well as West Coast.

.....We have got one in Gujarat Coast and the other is in the East Coast on Krishna-Godavari Basin. It is because there is some possibility of deep draught.”

9.24 The Committee note that MDL has not been able to qualify as the main bidder in shipbuilding tenders due to non-availability of adequate infrastructure as compared to the private/foreign shipyards. The Committee further note that other shipyards are blessed with low labour input cost and overheads and cut in octroi duties and various subsidies. The Committee, therefore, recommend that Ministry should chalk out a plan for development and strengthening of infrastructure of Defence shipyard, not only for effective participation in shipbuilding tenders but also to qualify as the main bidder. The Committee also recommend that a study group

should be constituted to examine the possibility of extending exemptions to defence shipyards in the matter of subsidies, tax benefits and excise duties etc. in order to make it cost effective and competitive with foreign/private shipyards.

9.25 The Committee also note that there has not been any export by the company during the last five years. The Committee hope that after substantial investment for modernisation of shipyard MDL, it would be possible to initiate and enhance the export at the optimum level. For this purpose, the Committee desire that Government should explore the possibility of subsidising shipyards heavily and to extend soft loan credit facility to the buyers as is being done by some other countries.

9.26 The Committee note that perspective plan of MDL is based on the Navy's acquisition plans for the Tenth and Eleventh plan period. The Committee desire that not only proposed Navy acquisition plan should be implemented effectively but also Committee should be apprised about effective steps taken by the Ministry in this regard.

9.27 The Committee note the difficulties posed by the CMD, MDL regarding expansion of the shipyard since at present the draught of the shipyard is only 4.5 meters and there is no scope of further increase in draught as well as in length and breadth as it is surrounded by Mumbai Port Trust and ship-breaking yard of Darukhana. The Committee also note that MDL is looking for Green Field site for deeper draught to hit the global market and to make bigger ships. The Committee, therefore, recommend that the Government should explore the possibility of arranging a site at the Gujarat Coast or East Coast, so that the trained manpower and resources of MDL could be utilised for ship building of more than 1000 tonnes for exports, thereby enabling the MDL to hit the global market.

9.28 The Committee note that submarine building facility in MDL has been lying idle for more than eleven years as no order was given to them. The Committee have been informed that a decision has now been taken to manufacture Scorpene class submarine with French technology and French parts in MDL. Since the acquisition of submarine has been long delayed, the Committee desire the Ministry to take urgent steps to upgrade the facilities at submarine building of MDL in a time-bound manner with adequate allocation of funds and induction of technical manpower so that any further delay in manufacturing of submarine may be avoided.

CHAPTER X

PRIVATE SECTOR PARTICIPATION IN DEFENCE PRODUCTION

10.1 The defence requirements of armed forces are largely met by DPSUs and ordnance factories which form the backbone of defence production. The private sector which would not participate in defence production earlier has grown in size and reach over the years. It has acquired modern manufacturing capabilities and resources. The Government opened up defence production to private sector and opened 26% Foreign Direct Investment (FDI) in May 2001. In reply to a question why FDI in Defence Sector has not yet taken place, the Ministry has replied as under:

“Presently, in the Defence strategic sector, Foreign Direct Investment (FDI) is permitted with prior Government approval subject to licensing and security requirements. Government had recently considered a proposal to impose the composite ceiling of 49% with no sub-ceiling for FDI and FII (Foreign Institutional Investment) in the Defence Production sector. After a careful examination of the proposal, it was decided that in view of the current geo-political environment in the sub-continent, it will not be appropriate to expose the strategic Defence Sector to the uncertainty caused by sanctions/withdrawals etc. under the policy of foreign government.”

10.2 To understand the role of private sector in defence production and how they can contribute more effectively in strengthening indigenous defence production, the Committee decided to hear the views of Confederation of Indian Industry.

10.3 In a presentation before the Committee the representatives of Confederation of Indian Industry strongly emphasized the need for public-private partnerships for co-development and manufacture of defence system. They stated that Secretary (Defence Production) should be given a mandate to develop private/public defence production capabilities in the country.

10.4 On being asked by the Committee regarding capability of private sector to meet the requirement of defence forces, the representative stated:

“when we look at generic... capability, there are enough islands of excellence within the country. There is enough basic capability in Indian industrial sector to meet the requirements. But we talk specific things. Unless the Indian industry goes through the process of developing it for a customer. The capability does not exist and that is a journey that we all have to take.”

10.5 They further stated preferential treatment is being given to foreign vendors in payment terms and duties and taxes. Indian vendors are loaded with Excise, Sales Tax, and Octroi as applicable where as foreign vendor is generally exempt from all duties. They, therefore, stressed for level playing field with foreign vendor.

10.6 When asked about the reaction of Defence Ministry of the problem of private sector, the representative stated:

“We are constantly dialoguing with them and we find at the level of policy-making, there is a very positive approach. Implementation is the biggest issue.”

10.7 The Committee note that over the years the private sector has grown in size and reach to form an important part of country's industrial base. The Committee are of the view that their capabilities and resources should be made use of in strengthening the country's defence production. The Committee feel that with their expertise and capability, the public/private sector/DRDO can contribute in building self reliance and home grown technologies in major defence systems. The Committee also feel that now there is a need to create an environment where both public and private sector/DRDO can grow together and be partner with each other. Further R&D efforts of both the public and private sector should be synergised and, coordinated by the DRDO.

The Committee, therefore, recommend the Government to chalk out a National Defence Production policy to synergise the capabilities of public and private sector and DRDO in defence production with greater emphasis on indigenous content. The Committee also recommend the Government to explore the possibility of promoting defence R&D by involving private sector in selective R&D projects.

10.8 The Committee note that at present 45% of the production work is outsourced to private sector. The Committee desire the Government to explore the possibility of outsourcing more and more work to the private sector particularly in areas where they have sufficient infrastructure and technology to supply the required products.

NEW DELHI;
16 February, 2006

27 Magha, 1927 (Saka)

BALASAHEB VIKHE PATIL,
Chairman,
Standing Committee on Defence.

APPENDIX

MINUTES OF THE THIRTIETH SITTING OF THE STANDING COMMITTEE ON DEFENCE (2004-05)

The Committee sat on Tuesday, the 24th May, 2005 at 1100 hrs. to 1235 in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Shri, Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri A.V. Bellarmin
3. Shri Suresh Chandel
4. Shri Thupstan Chhewang
5. Shri Ramesh Jigajinagi
6. Dr. C. Krishnan
7. Shri S.D. Mandlik
8. Shri Ganesh Prasad Singh

Rajya Sabha

9. Dr. Farooq Abdullah
10. Shri Janardan Dwivedi
11. Shri Pramod Mahajan
12. Shri Anand Sharma
13. Shri Lalit Suri

SECRETARIAT

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

List of Witness of Ministry of Defence

1. Shri Ajai Vikram Singh, Defence Secretary
2. Shri M. Natarajan, Secretary (R&D)

3. Ms. Somi Tandon, Secretary (Def. Min.)
4. Shri S. Banerjee, Addl. Secretary (DP)
5. Shri H.C. Gupta, Special Secretary (Acq.)
6. Shri V.R.S. Natarajan, CMD, BEML
7. Maj. Gen. R.S. Balyan, DQA (Armament)
8. Shri Sudhir Nath, JS (HAL)
9. Smt. Rita Menon, JS (SY)
10. Shri Alok Perti, JS (S/OF)
11. Shri Tapan Ray, JS (X)
12. Shri R.K.M. Bhattacharya, JS (C)
13. Shri P.K. Mishra, Chairman, OFB & DGOF
14. R.Adm. R.M. Bhatia, CMD, MDL
15. Shri Devasis Chowdhury, CMD, Midhani

2. At the outset, the Hon'ble Chairman welcomed the representatives of Ministry of Defence to the sitting of the Committee and invited them to brief the Committee on the subject 'Defence Ordnance Factories' and 'Defence Public Sector Undertakings'.

3. The Defence Secretary then informed that a presentation on Defence Ordnance Factories and Defence Public Sector Undertakings which would be made before the Committee by the concerned official.

4. The Chairman, Ordnance Factory Board then apprised the Committee about the brief history of Indian Ordnance Factories organisation, location of ordnance factories, share of Ordnance Factories in defence production and share of Ordnance Factories in Army Budget. He also apprised the Committee about the ammunitions and explosives being supplied to Defence Forces by the Ordnance Factories. He also stressed for autonomy for Ordnance Factories.

5. Representative of the Ministry also informed the Committee about the MBT Arjun and its production capacity which would be fifty tanks per year from 2007-08 onwards. He further stated that there would be continuous growth in turnover, productivity and expansion of customer profile. The Ordnance Factories were facing challenges in the field of stagnant requirement of Indian Armed Forces, changes in Geo-political scenario, rapid advancement in war technology, opening up of Defence sector to Private Sector, no scope for growth in export in the operated market segment. The Ministry further informed that the Ordnance Factories was also upgrading 155 mm Bofors guns.

6. The Chairman and Members raised certain queries on the functioning of Ordnance Factories and the same were resolved by the Ministry. The Members also desired that a visit to PSUs/Ordnance Factories may be arranged at the earliest.

7. The briefing remained inconclusive.

8. The verbatim record of the proceedings was kept.

The Witnesses then withdrew.

The Committee then adjourned.

MINUTES OF THE THIRTY FIRST SITTING OF THE STANDING
COMMITTEE ON DEFENCE (2004-05)

The Committee sat on Thursday, 2nd June, 2005 at 1100 hrs. to
1615 in Committee Room No. 139, Parliament House Annexe,
New Delhi.

PRESENT

Shri, Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri Ramesh Jigajinagi
3. Dr. C. Krishnan
4. Shri Raghuraj Singh Shakya
5. Shri Balashowry Vallabhaneni

Rajya Sabha

6. Shri Janardan Dwivedi
7. Shri Lalit Suri

SECRETARIAT

1. Shri M. Rajagopalan Nair — *Additional Secretary*
2. Shri P.K. Bhandari — *Director*
3. Smt. Anita Jain — *Deputy Secretary*
4. Shri D.R. Shekhar — *Under Secretary*

Representatives of Ministry of Defence

1. Shri Ajai Vikram Singh, Defence Secretary
2. Shri Shekhar Dutt, Secretary (DP)
3. Dr. M. Natarajan, Secretary (R&D)
4. Ms. Somi Tandon, Secretary (Defence Finance)
5. Shri H.C. Gupta, Special Secretary (Acquisition)
6. Shri S. Banerjee, AS (DP)

7. Shri Ranjit Issar, Additional Secretary (I)
8. Shri Sudhir Nath, JS (HAL)
9. Smt. Rita Menon, JS (SY)
10. Shri Alok Perti, JS (S/OF)
11. Shri Tapan Ray, JS (X)
12. Shri R.K.M. Bhattacharya, JS (COORD)
13. Shri S.C. Narang, CCR &D (R&M)
14. Shri K.U. Limaye, CCR&D (ECS)
15. Dr. D. Banerjee (CCR&D) (AMS)
16. Maj. Gen. R.S. Balyan, DQA (Armament)
17. Shri P.K. Misra, Chairman OFB & DGOF
18. Shri Ashok K. Baweja, Chairman, HAL
19. Shri V.R.S. Natrajan, CMD, BEML
20. Maj. Gen. R. Gossain, CMD, BDL
21. Shri Y. Gopala Rao, CMD BEL
22. R Adm. R.M. Bhatia, CMD, MDL
23. Shri Devasis Chowdhury, CMD, Midhani
24. Rear Adm. Sampath Pillai, CMD GSL
25. Cmde G.N. Sreekumar, CMD, GRSE
26. Shri B. Saha, Secretary, OFB
27. Cdr Hardev Inder, Regional Chief Minister, GRSE
28. Shri K.G. Gupta, DDB/O.F. Cell

2. At the outset, the Hon'ble Chairman welcomed the representatives of the Ministry of Defence to the sitting of the Committee and invited them to make presentation on the subject 'Defence Ordnance Factories'. The representatives of the Ministry apprised the Hon'ble Chairman and some members of the Committee of the various aspects of the ordnance factories viz. capacity utilization, technological upgradation, manpower planning, etc. The Committee felt that a roadmap should be prepared for the Defence Public Sector Undertakings (DPSUs), Ordnance Factories and R&D Organisations with the aim of attaining self-reliance in Defence technologies. The Defence Secretary and other representatives of the Ministry further elaborated the issues raised by Members.

3. The committee resumed the sitting after lunch break and heard the presentation by the representatives of the Ministry on Defence

Public Sector Undertakings (DPSUs). Out of the eight Defence PSUs, Chief Managing Directors (CMDs) of the four PSUs viz Hindustan Aeronautics Limited (HAL), Bharat Electronics Limited (BEL), Mishra Dhatu Nigam Limited (MIDHANI), and Bharat Earth Movers Limited (BEML) made presentation on the functioning and performance of their respective organisation.

4. The Committee discussed with representatives of HAL the issues of participation of Private Sector in the production of fighter aircraft so as to minimise dependency on foreign suppliers, shortage of manpower in HAL in view of the ongoing recruitment policy of the Government. The CMD of BEL *inter-alia* apprised the Committee of the major projects where BEL is closely working with DRDO and supply of Radars to Defence Forces. The representative of MIDHANI apprised the Committee of the strategic importance of company in supply of special materials like super alloys for Department of Space, Atomic Energy & Defence. He also replied to queries of members regarding manufacture of bullet proof jackets for the Armed Forces. The CMD, BEML elaborated the major achievements of the company.

5. The representatives of the Ministry then responded to the queries raised by the Chairman and other members of the Committee. The Presentation, however, remained inconclusive.

6. A verbatim record of the proceedings was kept.

The Committee then adjourned.

MINUTES OF THE THIRTY THIRD SITTING OF THE STANDING
COMMITTEE ON DEFENCE (2004-05)

The Committee sat on Monday, the 4th July, 2005 at 1500 hrs. to 1800 in Committee Room No. 'G-074', Parliament Library Building, New Delhi.

PRESENT

Shri, Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri Churchill Alemao
3. Shri Iliyas Azmi
4. Smt. Sangeeta Kumari Singh Deo
5. Shri Ramesh Jigajinagi
6. Shri Suresh Kalmadi
7. Shri S.D. Mandlik
8. Dr. K.S. Manoj
9. Shri Raghuraj Singh Shakya
10. Shri Mahadeorao Shivankar
11. Shri Balashowry Vallabhaneni
12. Ms. Ingrid Mcleod

Rajya Sabha

13. Shri R.K. Anand
14. Gen. (Retd.) Shankar Rao Chowdhury
15. Smt. N.P. Durga
16. Shri Janardan Dwivedi
17. Shri Mukhtar Abbas Naqvi
18. Shri Anand Sharma
19. Shri Lalit Suri

SECRETARIAT

1. Shri John Joseph — *Secretary*
2. Shri P.K. Bhandari — *Director*
3. Smt. Anita Jain — *Deputy Secretary*
4. Shri D.R. Shekhar — *Under Secretary*

Representatives of Confederation of Indian Industry

Sl.No.	Name	Designation
1.	Shri Satish K. Kaura	Chairman, CII Fiscal and Institutional Infrastructure Council
2.	Shri M.V. Kotwal	Sr. Vice President, Larsen & Toubro Limited
3.	Brig. K.A. Hai	Chief Executive, Mahindra and Mahindra Limited
4.	Shri Joseph Alexander	Vice President (Govt. Relations) Tata Services Limited
5.	Shri S. Sen	Head Defence Division and Deputy Director General, CII
6.	Shri N.B. Mathur	Adviser, CII
7.	Shri Sujith Haridas	Director (Defence), CII
8.	Shri Rakesh Kumar Verma	Consultant (Defence), CII
9.	Shri V. Vaidhyanathan	Executive Officer, CII
10.	Dr. A. Bashir	GM, Tata Power

Representatives of Ministry of Defence

Sl.No.	Name	Designation
1.	Ms. Somi Tandon	Secretary (Def. Fin.)
2.	Shri H.C. Gupta	Spl. Secy. (Acq)
3.	Shri Ranjit Issar	Additional Secretary (I)
4.	Shri S. Banerjee	Addl. Secy. (DP)
5.	Smt. Rita Menon	JS (SY)
6.	Shri Alok Perti	JS (S/OF)
7.	Shri R.K.M. Bhattacharya	JS (COORD)

8.	Shri D.C. Bajaj	Adviser (Cost)
9.	Maj. Gen. R. Gossain	CMD, BDL
10.	Rear Adm. R.M. Bhatia	CMD, MDL
11.	Rear Adm. Sampath Pillai	CMD, GSL
12.	Rear Adm. T.S. Ganeshan	CMD, GRSE

2. At the outset, the Hon'ble Chairman welcomed the representatives of Confederation of Indian Industry (CII) to the sitting of the Committee and invited their attention to Direction 58 of the Directions by the Speaker, Lok Sabha and asked them to brief the Committee on 'The Role of Private Sector in Defence Production'. The representatives of Confederation of Indian Industry apprised the Committee about the burgeoning defence imports which amounted to 70 percent of the present requirements. They further informed that the import of equipments included sub-systems and components which could be made within the country instead of importing them. The representatives of the CII expressed need to move beyond import substitution and to depend on "Home Grown Technologies".

3. Representatives of CII also stressed that basic capability and potentiality of the Indian Industrial sector would have to be developed in the area of atomic energy, space and defence sector. They further stressed to develop strong private/public partnership and the private sector could be benefited with the huge set up of CSIR and DRDO labs. The CII further deposed that Government must take imperative initiative for strong private sector participation in defence sector. It was pointed out that for basic R&D, there was a need to change the concept 'of no cost no commitment' to 'full cost no commitment' or 'no cost full commitment'.

4. The Chairman and Members raised certain queries and the same were resolved by the representatives of CII. On certain issues, representatives of CII assured to furnish the information to Committee later on.

(Witnesses then withdrew)

5. The Hon'ble Chairman then brought to the notice of the Committee Members that the permission to visit PSUs/Ordnance Factories is still pending clearance from Hon'ble Speaker and that he had decided to hold the meeting with all the Chairmen of the Parliamentary Committees in the ensuing session and would give clearance after that only.

6. Hon'ble Chairman then welcomed the representatives of Ministry of Defence and invited their attention to Direction 55 of the Directions by the Speaker, Lok Sabha and asked them to brief the Committee on the role of defence shipyards in attaining self-reliance in the production of off-shore patrol vessels and submarines and frigates for the defence forces and also the constraints being faced by them.

7. CMD, Mazagon Dock Limited gave presentation on financial performance, major on-going projects, capacity utilisation, new initiatives planned, R&D efforts, MoU achievements, area of concern and support required. The Committee expressed their displeasure over non-utilisation of submarine construction capability which was lying idle. CMD stated that for the last ten years, there were no orders for construction of submarines, however, 71 percent of shipbuilding capacity was being utilised. Secretary (Defence Finance) replied that decision for giving orders for construction of submarines to MDL was being processed at the highest level in the Ministry.

8. CMD, Goa Shipyards Limited (GSL) and CMD, Garden Reach Shipbuilders & Engineers (GRSE) also gave presentations on the profile of the two companies, order book position and capacity utilisation. The Chairman and Members raised certain queries and the same were resolved by the representatives of Ministry of Defence.

9. The verbatim record of the proceedings was kept.

The witnesses then withdrew.

The Committee then adjourned.

MINUTES OF THE THIRTY FOURTH SITTING OF THE
STANDING COMMITTEE ON DEFENCE (2004-05)

The Committee sat on Thursday, the 14th July, 2005 at 1610 hrs. to 1740 hrs. in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Shri Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri Churchill Alemao
3. Shri Iliyas Azmi
4. Shri A.V. Bellarmin
5. Shri Suresh Chandel
6. Smt. Sangeeta Kumari Singh Deo
7. Dr. C. Krishnan
8. Shri Raghuraj Singh Shakya
9. Shri Ganesh Prasad Singh
10. Shri Balashowry Vallabhaneni
11. Ms. Ingrid Mcleod

Rajya Sabha

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

SECRETARIAT

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

Representatives of Ministry of Defence

Sl.No.	Name	Designation
1.	Shri Ajai Vikram Singh	Defence Secretary
2.	Shri Shekhar Dutt	Secretary (DP)
3.	Ms. Somi Tandon	Secretary (Defence Finance)
4.	Shri Ranjit Issar	Additional Secretary (I)
5.	Shri S. Banerjee	Additional Secretary (DP)
6.	Dr. A.S. Pillai	CCR&D (ACE&NS)&DS
7.	Shri Alok Perti	JS (S)
8.	Smt. Rita Menon	JS (SY)
9.	Shri Sudhir Nath	JS (HAL)
10.	Shri S.C. Narang	CCR&D (R&M)
11.	Maj. Gen. Rajnesh Gossain	CMD, BDL

2. At the outset, the Hon'ble Chairman welcomed the representatives of the Ministry of Defence to the sitting of the Committee and invited them to make presentation on Bharat Dynamics Limited. The CMD, BDL apprised the Committee about the mission statement of the company and stated that BDL established itself as an industry for manufacturing of Integrated guided weapons and simultaneously emerged as a sophisticated, self-sufficient, high technology enterprise, serving the defence needs of the nation.

3. The representative of BDL also apprised the Committee about the production of (27,000) Milan missiles for the Indian Army in collaboration with Euro Missiles of France and the Russian type Konkur Missile.

4. The representative of BDL highlighted the company's achievement regarding Prithvi-II and Dhanush Missile which were developed with successful participation of BDL and DRDO.

5. The Secretary (Defence Production) then replied to queries of members regarding export control regime of missile. He stated that for exports desirability/permissions has to be taken from the Minister of External Affairs in each case.

6. The representatives of the Ministry then responded to the queries raised by the Chairman and other members of the Committee on private sector participation in defence production.

7. The Members of the Committee again demanded for a immediate tour to the PSUs and Ordnance Factories to see the actual working of such units before making necessary recommendations and also expressed desire to meet the Speaker at the earliest.

8. A verbatim record of the proceedings was kept.

Witnesses then withdrew.

The Committee then adjourned.

MINUTES OF THE FOURTEENTH SITTING OF THE STANDING
COMMITTEE ON DEFENCE (2005-06)

The Committee sat on Tuesday, the 20th December, 2005 from 0930 hrs. to 1020 hrs. in Committee Room No. '139', Parliament House Annexe, New Delhi.

PRESENT

Shri Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri Iliyas Azmi
3. Shri Suresh Kalmadi
4. Dr. C. Krishnan
5. Shri S.D. Mandlik
6. Dr. K.S. Manoj

Rajya Sabha

7. Smt. N.P. Durga
8. Shri Anand Sharma
9. Shri Lalit Suri

SECRETARIAT

1. Shri R.C. Ahuja — *Joint Secretary*
2. Smt. Anita Jain — *Deputy Secretary*
3. Shri D.R. Shekhar — *Under Secretary*

2. At the outset, the Chairman welcomed the Members to the sitting of the Committee.

3. The Committee then took up draft report on 'Defence Public Sector Undertakings' for consideration. However, Hon'ble Chairman suggested that some more issues need to be incorporated in the draft Report. Accordingly, the Committee decided to postpone the consideration of the draft report. The Committee also decided to consider the amended draft report during the Budget Session of the Parliament.

The Committee then adjourned.

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

The Committee sat on Wednesday, the 8th February, 2006 from 1100 hrs. to 1130 hrs. in Committee Room 'D', Parliament House Annexe, New Delhi.

PRESENT

Shri Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri Iliyas Azmi
3. Shri Thupstan Cheewang
4. Dr. K.S. Manoj
5. Shri Raghuraj Singh Shakya
6. Shri Balashowry Vallabhaneni

Rajya Sabha

7. Dr. Farooq Abdullah
8. Shri Janardan Dwivedi

SECRETARIAT

- | | | |
|----------------------|---|-----------------------------|
| 1. Shri S.K. Sharma | — | <i>Additional Secretary</i> |
| 2. Shri R.C. Ahuja | — | <i>Joint Secretary</i> |
| 3. Smt. Anita Jain | — | <i>Deputy Secretary</i> |
| 4. Shri D.R. Shekhar | — | <i>Under Secretary</i> |

2. Under Rule 259 of the Rules of Procedure and Conduct of Business in Lok Sabha quorum of the Committee shall be as near as one third of the total members i.e. ten members, however as only 8 members came to attend the sitting, therefore, the sitting of the Committee was adjourned.

3. ** ** ** ** **

4. Hon'ble Chairman then directed that draft report on 'Defence Public Sector Undertakings' may be considered on 10th February, 2006 before the evidence of non-official experts on 'Review of Medical Education and Services in Defence Sector'.

The Committee then adjourned.

**Related to other matters.

MINUTES OF THE TWENTY THIRD SITTING OF THE STANDING
COMMITTEE ON DEFENCE (2005-2006)

The Committee sat on Friday, the 10th February, 2006 from 1100 hrs. to 1240 hrs. in Committee Room 'G-074', Parliament House Annexe, New Delhi.

PRESENT

Shri, Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri Thupstan Chhewang
3. Dr. C. Krishnan
4. Shri Raghuraj Singh Shakya

Rajya Sabha

5. Dr. Farooq Abdullah
6. Shri Janardan Dwivedi

SECRETARIAT

1. Smt. Anita Jain — *Deputy Secretary*
2. Shri D.R. Shekhar — *Under Secretary*

2. The Committee could not take up the consideration & adoption of draft Report on 'Defence Public Sector Undertakings' due to lack of quorum. Hon'ble Chairman directed that the draft report may be considered on 16th February, 2006.

3. ** ** ** ** ** **

The Committee then adjourned.

**Related to other matters.

MINUTES OF THE TWENTY FOURTH SITTING OF THE
STANDING COMMITTEE ON DEFENCE (2005-2006)

The Committee sat on Wednesday, the 16th February, 2006 from 1500 hrs. to 1700 hrs. in Committee Room 'D', Parliament House Annexe, New Delhi.

PRESENT

Shri, Balasaheb Vikhe Patil—*Chairman*

MEMBERS

Lok Sabha

2. Shri Iliyas Azmi
3. Shri A.V. Bellarmin
4. Shri Thupstan Chhewang
5. Dr. K.S. Manoj
6. Shri Mahadeorao Shiwankar
7. Shri Ganesh Prasad Singh
8. Shri Balashowry Vallabhaneni

Rajya Sabha

9. Dr. Farooq Abdullah
10. Smt. N.P. Durga

SECRETARIAT

1. Shri R.C. Ahuja — *Joint Secretary*
2. Smt. Anita Jain — *Deputy Secretary*
3. Shri D.R. Shekhar — *Under Secretary*

2. At the outset, the Chairman welcomed the Members to the sitting of the Committee.

3. The Committee then took up draft report on 'Defence Public Sector Undertakings' for consideration. The Committee considered and adopted the draft Report with some modifications. The Committee also authorised the chairman to present the report to the House of Lok Sabha after making necessary modifications changes in the report.

** ** ** ** ** **

The Committee then adjourned.

**Related to other matters.