

**COMMITTEE ON PUBLIC UNDERTAKINGS**

(2003-2004)

(THIRTEENTH LOK SABHA)

FIFTY-FIRST  
STUDY TOUR REPORT

ON

**MISHRA DHATU NIGAM LTD.**

**Laid in Lok Sabha on 19.12.2003**

**LOK SABHA SECRETARIAT  
NEW DELHI**

**December, 2003 / Agrahayana 1925(S)**

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**COMPOSITION OF COMMITTEE ON PUBLIC UNDERTAKINGS**  
**( 2003 – 2004 )**

**CHAIRMAN**

**Prof. Vijay Kumar Malhotra**

**MEMBERS**

**LOK SABHA**

2. Shri Mani Shankar Aiyar
3. Shri Ram Tahal Chaudhary
4. Smt. Reena Choudhary
5. Smt. Sangeeta Kumari Singh Deo
6. Shri C. K. Jaffer Sharief
7. Shri K. E. Krishnamurthy
8. Dr. Ramkrishna Kusmaria
9. Shri Vilas Muttemwar
10. Shri Shrinivas Patil
11. Shri Prabhat Samantray
12. Shri Tarit Baran Topdar
13. Prof. Rita Verma
14. Shri A.K.S. Vijayan
15. Shri Dinesh Chandra Yadav

**RAJYA SABHA**

16. Shri Suresh Kalmadi
17. Shri Lalitbhai Mehta
18. Shri Kalraj Mishra
19. Shri Satish Pradhan
20. Shri K. Kalavenkata Rao
21. Shri Jibon Roy
22. Smt. Ambika Soni

**SECRETARIAT**

- |    |                    |                      |
|----|--------------------|----------------------|
| 1. | Shri John Joseph,  | Additional Secretary |
| 2. | Shri S.Bal Shekar, | Director             |
| 3. | Shri C.S.Joon,     | Deputy Secretary     |
| 4. | Shri Raj Kumar,    | Under Secretary      |
| 5. | Smt. Lakhbir Kaur  | Executive Assistant  |

## **INTRODUCTION**

In pursuance of the procedure adopted under Rule 281 of the Rules of Procedure and Conduct of Business for laying the Fifty First Study Tour Reports on the Tables of both the Houses of Parliament, I, the Chairman, Committee on Public Undertakings have been authorised by the Committee to lay the Fifty First Study Tour Report on their behalf, lay the Study Tour Report of the Committee on their discussions with the officials of Mishra Dhatu Nigam Limited.

2. The Committee held discussions with the officials at Hyderabad on 12.4.2003. A copy of the tour Programme is annexed (Annexure-II).
3. The Committee considered and approved the Report at their sitting held on 17 December, 2003.
4. The Committee wish to express their thanks to. Mishra Dhatu Nigam Limited for providing facilities during the visit of the Committee and for supplying necessary material and information required in connection with the Study Tour.
5. They would also like to place on record their sense of appreciation for the invaluable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

New Delhi  
17 December, 2003  
26 Agrahayana, 1925(S)

**PROF. VIJAY KUMAR MALHOTRA**  
**CHAIRMAN**  
**COMMITTEE ON PUBLIC UNDERTAKINGS**

## **STUDY TOUR NOTES OF THE COMMITTEE ON PUBLIC UNDERTAKINGS**

### **Discussion with the Officials of Mishra Dhatu Nigam Limited on 12.4.2003 at Hyderabad**

At the outset, the Chairman, Committee on Public Undertakings (COPU) made opening remarks and then requested the Chairman & Managing Director, Mishra Dhatu Nigam Limited (MIDHANI) to introduce himself and his colleagues to the Committee. The Chairman, COPU also requested him to give a brief account of the working of the Company.

2. After introduction of officials of the Company, the Committee have been informed that the Mishra Dhatu Nigam Limited (MIDHANI), was conceived in the early 70s to achieve self-reliance in areas of special steels, super alloys, titanium alloys, etc. for strategic sectors and came into existence as a public sector undertaking 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 sectors like nuclear power generation, manufacture of aircraft, 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, Pechiney 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.

The Committee have also been informed that the ground work commenced in November 1976. However, commissioning of equipment and limited commercial production could start only by July 1983. The technical collaboration ended by 1989. Thereafter MIDHANI pursued the development and production activities on its own. MIDHANI has developed more than 75 alloys through its in-house R&D efforts which constitute major part of the present turnover. The plant at the time of setting up was designed to produce small quantities of products. Large scale manufacture was not visualised. The facilities so built were modern in line with contemporary technologies. But the scenario is now totally changed. Many grades of superalloys and special steel now considered the prime requirements of Defence, Space and Atomic Energy programmes were not visualised then.

3. It has been informed to the Committee that for nearly two decades, 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, ATVP, MIG and Kaveri Engine Programme (LCA). In the Space sector, they include PSLV, GSLV and in the field of atomic energy, the very special steels for nuclear power plants and fuel reprocessing. Practically every order executed by the Company is in import substitution. Achievements of MIDHANI

comprise widening customer base in India and abroad including source approval from Boeing, USA and Aurora Forgings, UK. Over the years, MIDHANI could achieve an indigenous production content of 73%. MIDHANI has an ambitious target of 80% indigenous production content in the next few years despite enormous dependency on import of raw materials like nickel, cobalt, chromium, titanium sponge, molybdenum powder, etc.

The Committee have also been informed that MIDHANI has made use of defence technology spin-off for a humanitarian cause. With the high level of expertise in manufacturing titanium alloys for space and aviation applications, some of which are also useful for body implants, MIDHANI has recently taken up development and manufacture of bio-medical implants such as hip & knee prosthesis, cortical and cancellous screws, intermedullary nails, rush nails, fracture fixation & spinal implants, etc. meeting international standards at a much lower price than those of imported ones. Several samples have been made and clinical trails are underway in a very well organised multi-institutional work involving Director General Armed Forces Medical Services, Armed Forces Medical College, Army Base Hospitals, Army Hospital (Research & Referral), Institute of Medical Sciences, Varanasi and some corporate hospitals.

4. It was pointed out by the Committee that the primary objective with which Midhani was established was to achieve self reliance and India should have its own research indigenously done in respect of various metals and alloys required by Strategic Sectors more particularly, in a situation where if any day any country decides to impose sanctions on India, the country's

Defence preparedness should not be at stake. When asked to state whether the materials manufactured by Midhani is available only with America or in any international market freely even after imposing sanctions, the Committee have been informed that there are materials, which are, required by strategic sectors in the country, import of which is not possible because of existence of sanctions.. For instance – MDN 350 for critical Nuclear applications and – Columbium based alloys for critical Space applications.

Midhani carried out its own Research and Development in close interaction with user organizations to develop these grades.

There have been instances where sanctions were imposed and import was not possible, but after the product was indigenously developed by Midhani sanctions were lifted. Aerospace quality Magnesium Alloy plate is an example. Indigenous production at Midhani should be supported as overseas suppliers may any day decide to impose sanctions.

5. The product range of MIDHANI is divided into five major categories :

1. **SUPERALLOYES**

Nickel base		
Cobalt- base	(Aero, Engineering)	General
Iron-base		

2. **TITANIUM & TITANIUM ALLOYS**

Commercially Pure Titanium (Power Plants, Chemicals Industry)  
Titanium alloys (Aircraft and Space Vehicles)



3. **SPECIAL PURCHASE STEEL**

Maraging Steels (Missiles, Space Vehicles)  
 Armament Steels (Tanks, Guns)  
 Nuclear Grade Steels (Nuclear Power Plant)  
 Special Stainless Steels (Thermal Power Plants, Chemical Industry)  
 Cryogenic Steels (Space)

4. **SPECIAL PRODUCTS**

Molybdenum Wire & Plates (Auto, Lamp, Nuclear)  
 Weld Consumables (Navy)  
 Magnesium alloys (Aero)  
 Titanium & Stainless Steel Tubes (Condensers in Power Plant)

5. **ALLOYS FOR ELECTRICAL & ELECTRONICS**

Resistance alloys  
 Controlled Expansion alloys  
 Soft Magnetic Alloys

6. The production performance of the Company for the last five years is given below :

(Rs. in crore)

Years	1998-99		1999-2000		2000-2001		2001-2002		2002-2003	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual (prov.)
Sales	105	93.37	110	110.48	115	112.61	120	104.3	120	100.29
Order Booking	120	101.23	120	81.25	110	116.34	120	129.19	120	117.22

7. When asked the reasons for decline in sales/order booking, it has been informed to the Committee that order booking from traditional sources such as Ordnance Factories, Atomic Energy, etc. and corresponding sales to them has declined. The Company was unable to get orders from Hindustan Aeronautics Limited. (HAL) as HAL was given Custom Duty exemption for the import of material. MIDHANI price is costlier as MIDHANI has not given

- **Sl.No. 7 of the General Exemptions Number 8 (Notification No. 39/96-Cus dated 23<sup>rd</sup> July 1996, as amended) in respect of Customs Duty available for Government imports including for Defence and Police is relevant in this regard.**
  - **Under this provisions HAL and BDL are in a position to import the ferrous and non-ferrous materials required for their Aircraft, Helicopter and Missiles and other Aero-space applications directly from abroad in view of the fact that orders for the products are placed directly by Ministry of Defence on HAL and BDL.**

The landed cost of these products are cheaper as compared with that of Midhani, in view of the fact that Midhani does not get the benefit of this Customs Duty exemption, for the simple reason that order for these materials are placed by HAL or BDL and not directly by Ministry of Defence and hence this makes Midhani's imports of these ineligible for this customs duty exemption.
- **The level plying field that company is seeking is for an amendment to this notification to state that if the said goods are imported for manufacture of products to be sold to Defence PSUs for use in the manufacture of aircrafts including helicopers and such manufacture is against an indent from Ministry of Defence and the aircrafts including Helicopters so manufactured are appropriated by Ministry of Defence. This would provide level playing field to Midhani, since the products manufactured by Midhani and sold to HAL and BDL would be for the ultimate use of Defence, though the orders on Midhani are not placed directly by the Ministry of Defence.**
- **With regard to Central Excise duty, the position is as follows. In terms of General Exemption Number 19 (Notification No. 63/95-C.E. dated 16<sup>th</sup> march, 1995 as amended) covering exemptions of goods manufactured by specified Units/ Institutions for use by Government Department or Defence Purposes, the exemption is available to Defence PSU's such as HAL, BEL, BDL, Midhani and BEML, if goods manufactured by them and supplied to Ministry of Defence for Official purposes.**
- **Under the above mentioned conditions, as long as the supplies are made directly to Ministry of Defence, the exemptions are available. However, in the case of Midhani the orders are placed by Defence PSU's and are executed by Midhani, which are, though, meant for ultimate consumption of Ministry of**

the import of material. MIDHANI price is costlier as MIDHANI has not given such exemption for import of raw material and supply to HAL, Bangalore. Sale of Commercial Grades like Heating Element Alloys, Powder, Metallurgy products, Controlled expansion alloys and Superalloys has also declined due to competition from foreign suppliers and disparity on the Custom Duty Structure on the finished material and raw material of imported items.

8. When asked who are the major buyers of the Company's products, the Committee have been informed as under:

Space Sector :	Vikram Sarabhai Space Centre, Liquid Propulsion Space Centre, Thiruvananthapuram.
Atomic Energy	Department of Atomic Energy, Nuclear Power Corporation of India Limited, Mumbai. Nuclear Fuel Complex, Hyderabad
Defence Sector	Ordnance Factories Board, Hindustan Aeronautics Limited, Bharat Dynamic Limited, Project Office (mat.), Hyderabad, Defence Research Development Organisation.
Commercial Sector	Bharat Heavy Electricals Limited, Railways, Lamp industries, Reliance Industries, Easun Reyrole, Bajaj Tempo, Crompton Greaves, etc.

9. When enquired about the problems/constraints being faced by the Company in manufacturing its products, the Committee have been informed as under :-

- a) Low Yields due to small capacity equipment
- b) Lack of balancing facilities
- c) Lack of funds for upgradation of old equipment & putting up new state-of-art equipment.
- d) Decline in orders from Defence & Atomic energy sectors.

10. When asked the remedial measures required to be taken/being taken to improve/optimize the performance of the Company, the Committee have been informed as follows :

- Custom duty exemption for raw materials imported by Midhani or price protection to maintain viability of MIDHANI
- Funds for upgradation of old equipment and putting up new state-of-art equipments for future; Financial Support to MIDHANI as a "Strategic National Facility" for development & supply of strategic materials.
- Equipment to convert feedstock into discs and other components for Aerospace, Power Plants, etc.
- Directive to Defence PSUs, DRDO units & Ordnance Factories to use Midhani capabilities & enable stockpile of raw materials for exigencies.
- Support Midhani for supply of finished components for T-70 Tanks, Kaveri Engine etc. as key supplier.
- Financing Midhani as main supplier of
  - World Class Bio-medical Implants & Devices.
  - Lightweight Armour of International standards for Army
- Inclusion of MIDHANI special Steels within the purview of proposed legislation on 'Buy Indian Act' for Steel Industry & advice to DRDO & OFB to use MIDHANI materials only.

11. The Committee have been informed that due to lack of orders from Defence Sector , the Company is accepting orders from Commercial Sector. When asked to the reasons for the same, the Committee have been informed that over the last few years, the offers from some customers from the strategic sector – Ordnance Factories, Atomic Energy, etc., have shown a declining trends, despite the fact that some of these Metals and Alloys, have been specifically developed by the Company, for these customers.

(Rs. in crore)

S.No	Description	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03 (Prov.)
1.	Defence						
	Ordnance Factories	34.04	4.77	7.21	1.69	7.21	
	Others	8.25	7.39	26.07	49.83	15.37	
	Sub-Total	42.29	12.16	33.28	51.52	22.58	41.57
2.	Deptt. of Space	34.16	10.14	2.73	2.47	57.42	38.23
3.	Deptt. of Atomic Energy	1.83	43.81	9.60	10.67	3.88	11.70
4.	Others	30.26	35.12	35.64	51.88	45.31	25.72
	Grand Total	108.54	101.24	81.25	116.34	129.19	117.22

- An analysis of the status of orders booking vis a vis sales, would indicate that the Company has been surviving on the orders received on a year to year % viz., Bullet Proof Jackets, Helmets and up – armouring of Vehicles with Midhani developed armour plates, Bio Medical implants, Welding Electrodes, Investment castings, Titanium castings, stainless steel and titanium clad steel forgings, etc., and company has also decided as a part of growth strategy to offer value added items to the customers by taking recourse to availing of the facilities available in Government Department (NFC), Public Sector (RSP) and Private Sector (since such down stream facilities are not available in the Company) and offer a bouquet of services to the customers viz., Gas Bottles, Stainless Steel and Titanium Tubes, Large Diameter Rings of Maraging Steel, Stainless Steels, Low Alloy Steels, Superalloys and Titanium alloys, several complex profited closed die forgings, etc.
- Besides, the Company has also made forays into the Commercial sectors in order to ensure that the capacities of the Company are utilised appropriately. Due to severe competition from this commercial sector, the Company has been compelled to price its products at marginal cost to ensure price competitiveness to bag orders to maximise the capacity utilisation.
- Even in Commercial Sector orders have been on the decrease for Grades like Heating Elements Alloys, Powder Metallurgy Products (Molybdenum), Controlled Expansion Alloys and the Super Alloys

- Even in Commercial Sector orders have been on the decrease for Grades like Heating Elements Alloys, Powder Metallurgy Products (Molybdenum), Controlled Expansion Alloys and the Super Alloys due to competitions from Foreign Suppliers and dumping of materials from China.

12. When enquired about the constraints which prevents the Company not to offer competitive prices to the customers when compared to the Foreign Suppliers, the Committee have been informed as under :

- The primary consideration while selecting the equipment and facilities at the time of setting up of the Company in 1973 was their versatility and flexibility to handle large number of MIL products covering a number of alloys groups.
- At that stage, large scale manufacturing and competing with the price of imported goods was not the consideration. Self Reliance in the strategic sector was the only consideration.
- In today's scenario where the market drives the Company, these small capacity equipments, small batch size production compared with International players has made the production in the Company uneconomic and has also resulted in longer cycle/delivery time. This apart, the lack of down stream conversion facilities value added products have affected the Company's operations for products like Rings, Plates, Close Die Castings, etc., The major problem has been that these facilities are nearly 20 years old and most of them are very low productive.
- These attributes have made the prices of the products of the Company unfavorable to the customers.
- Despite the above the Company is in a position to compete with the imported price provided there is level playing field.
- Non-availability of Customs Duty exemption to the Company for import of essential Raw Materials, which in fact are available to other Defence PSU's like Hindustan Aeronautics Limited (HAL) and Bharat Dynamics Limited (BDL) is making the prices of Company products costlier than the imported price at which these Defence PSU's are able to procure from abroad, thereby depriving Midhani of its orders for supply.

- Sl.No. 7 of the General Exemptions Number 8 (Notification No. 39/96-Cus dated 23<sup>rd</sup> July 1996, as amended) in respect of Customs Duty available for Government imports including for Defence and Police is relevant in this regard.
  - Under this provisions HAL and BDL are in a position to import the ferrous and non-ferrous materials required for their Aircraft, Helicopter and Missiles and other Aero-space applications directly from abroad in view of the fact that orders for the products are placed directly by Ministry of Defence on HAL and BDL.

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- The level playing field that company is seeking is for an amendment to this notification to state that if the said goods are imported for manufacture of products to be sold to Defence PSUs for use in the manufacture of aircrafts including helicopters and such manufacture is against an indent from Ministry of Defence and the aircrafts including Helicopters so manufactured are appropriated by Ministry of Defence. This would provide level playing field to Midhani, since the products manufactured by Midhani and sold to HAL and BDL would be for the ultimate use of Defence, though the orders on Midhani are not placed directly by the Ministry of Defence.
- With regard to Central Excise duty, the position is as follows. In terms of General Exemption Number 19 (Notification No. 63/95-C.E. dated 16<sup>th</sup> march, 1995 as amended) covering exemptions of goods manufactured by specified Units/ Institutions for use by Government Department or Defence Purposes, the exemption is available to Defence PSU's such as HAL, BEL, BDL, Midhani and BEML, if goods manufactured by them and supplied to Ministry of Defence for Official purposes.
- Under the above mentioned conditions, as long as the supplies are made directly to Ministry of Defence, the exemptions are available. However, in the case of Midhani the orders are placed by Defence PSU's and are executed by Midhani, which are, though, meant for ultimate consumption of Ministry of Defence, the benefit of such exemptions is not available to Midhani. This additional excise duty at 16% of the cost of the

product makes the cost to the purchaser (Defence PSU's) expensive and thereby prices of Midhani products become uncompetitive.

- In order to overcome this difficulty, Company seeks level playing field with an amendment to this notification to state "if manufactured by the following units and are for supply to the Ministry of Defence for official purposes or for supply to any of the following units for use in manufacture of products for ultimate supply to the Ministry of Defence for official purposes."
- This amendment would enable the price of the Midhani products to be competitive and also prevent the cascading effect of Excise Duty on the products manufactured by Defence PSUs for consumption in the manufacture of final product by another Defence PSU for supply to Ministry of Defence.
- This apart the level playing field is sought in rectifying the unfavorable duty structure relating to import of Raw Materials vis a vis finished goods.

13. When enquired about the performance of the Company in comparison to the International position in terms of technology, costs and time involved, the Committee have been informed that the MIDHANI is having production constraints in manufacturing sheets of width of more than 1000 mm, whereas imported sheets and plates are readily available in larger widths in the market at a cheaper price, e.g. Superni 600.

Imported Moly wire is being supplied by the manufacturers like Plansee at a cheaper rate with credit period of more than 3-6 months to various Lamp Industries like Vijay Wires, Mysore : WEBFIL, Kolkata; Surya Roshni, etc. Midhani delivery period ranges from 3-6 months whereas imported supplies are readily available in the market. Midhani having the old technology of Rolling Flat by Flat and welding the coil by Flashbutt Welding. Due to this the yield of down stream ships like CRM & B&WD is less making



these products costlier whereas foreign suppliers are rolling these grades in continuous coil from enabling them to supply at a cheaper rate.

14. The following table shows the profit/loss of the Company against the target in the last 10 years:-

(Rs. in lakh)

YEAR	TARGET	PROFIT/ LOSS(-)
1993-94	247.50	465.38
1994-95	446.63	628.40
1995-96	542.89	688.08
1996-97	434.72	511.74
1997-98	332.00	263.45
1998-99	109.00	217.88
1999-00	118.00	213.85
2000-01	72.00	23.75
2001-02	38.00	35.67
2002-03 (Prov)	40.00	-395.00

15. When asked the reasons for decline in profits, the Committee have been informed as under:

- a) Though the input costs have gone up, the selling prices of the Company products have to be kept lower and competitive under severe pressure from Foreign Competitors.
- b) Increasingly unfavorable duty structure relating to import of raw materials vis-à-vis finished products.
- c) In the liberalised import scenario some of the alloys for whose production, the Company was established are now being imported by the users from western countries due to lower prices. These Foreign Competitors practice economic scale of operations, have lower power and fuel tariff and enjoy higher productivity resulting in lower cost of their products.

16. When enquired about the steps taken/being taken by the Company to reverse the trend of declining profits, it has been informed to the Committee that the Company initiated certain turnaround strategies to arrest the trend of losses. The important amongst them are as under :

- a) Establishment of new/alternative/less expensive sources of raw materials and recycling of internally generated scrap, thus obviating the necessity of procuring fresh/new raw materials. This resulted in cumulative saving of Rs. 96.27 crore from 1993-94 to 2001-02.
- b) Being a power intensive industry, arrangements were made for sourcing cheaper power by becoming a participant shareholder in Andhra Pradesh Gas Power Corporation Limited (APGPCL). This resulted in saving of Rs. 23.43 crore from the year 1990-91 to 2001-02.
- c) By investing Short Term surplus funds, received from the customers as advances, judiciously within the parameters of the guidelines issued by the Department of Public Enterprises, cumulative interest earned was Rs. 71.55 crore from 1987-88 to 2001-02.

17. As intimated to the Committee, the diversification plan as per the perspective plan undertaken by the Company is as follows :

Diversification plan as per perspective plan	Products	Users	Present Status
Special Weld Consumables	Welding Electrodes	ATVP/Navy	Machinery installed. Production is in progress.
Titanium Air Bottles	Titanium Welded Products	ISRO/DRDO	In progress
Medical Implants	Hip & Knee Prostheses, plates, screws, nails etc	Services & Civil Hospitals	In progress
Rotary Forging of	Barr Stocks for	HAL, GTRE,	Tendering

Long Bars & Tubes	aero engine component	VSSC, BHEL	done. Offers under evaluation
Isothermal Forging of Gas Turbine Engine Components	Turbine Discs	HAL, DRDO	Tie up with Russian Institute.

18. When asked about the details of projects undertaken by the Company for meeting the emergency requirements of special metals and alloys as well as finished components for Defence, Atomic Energy, Space and hi-tech engineering sectors during the last three years, the Committee have been informed as follows :

- (a) Weld consumables for Navy
- (b) Air Bottles for Space & DRDL
- (c) Columbium alloy (C-103) sheets & rods for space
- (d) 304 L Plates for Department of Atomic Energy
- (e) Components for Kaveri Engine Programme
- (f) Uparmouring of Tata 1212 Truck for SPIC, (DRDO).
- (g) Investment Cast components to BHEL, Crompton Greaves, etc.
- (h) High pressure Air Bottles for Defence Machinery Development Establishment (DMDE)

19. On the question of funds required for revamping, modernisation, new projects, etc., the Committee have been informed that the Company went into commercial production in the year 1983 and could wipe out Rs.33.15 crore of accumulated losses from total accumulated losses of Rs. 33.68 crore. The balance accumulated losses stood at Rs.0.53 crore as on 31.3.02. As the machinery is aging, the Company needs revamping, modernisation and rationalisation of certain processes keeping in view the technological

improvements. But the Company has no surplus funds to implement these issues as well as new Projects to cater to the Strategic Sectors.

A proposal covering a total expenditure of Rs. 99.55 crore in the coming years has already been made to Ministry of Defence and a Cabinet paper on these lines for extending support to MIDHANI for its survival.

20. When asked as to why the Company is unable to meet the funds requirement for upgradation and modernisation from internal services, the Committee have been informed as under :

- The Company is not in a position to meet the funds requirement from its internal resources. With the existing aged machinery and equipment, the performance of the Company is going to slide further and the Company will not be able to invest any funds required, even for urgent repairs.
- The Company has considered other alternatives such as raising of loans from Banks/Financial Institutions/obtaining Government of India loans, at concessional rates of interest and enhancement of the Equity capital of the Company.
- Keeping in view the commercial risks involved in the products being produced by the Company and also the present financial health, the Company is not hopeful of obtaining substantial loans from Banks and Financial Institutions.
- Even if Government of India provides loans at concessional rates of interest, the Company will not be in a position to service even the interest liability leave alone the repayment of loans in the coming years.
- The capital restructuring of the Company in 1985 has also not resulted any significant improvement in the performance of the Company and therefore, taking recourse to enhancement of Equity Capital may not yield desired results.
- Further, any additional infusion of Equity to the existing Equity of Rs. 137.34 crore would make the company over capitalised and highly capital geared and would adversely effect the various financial ratios such as return of Equity/Investment, net Profit to Capital Employment, etc., which it is feared would come in the way

- Taking into account all the above factors, it is essential that the up-gradation and modernisation of the Company is met by way of Budgetary Grant as a special case.

21. The Export performance of the Company during the last 5 years is as under :

(Rs. in lakh)

Year	Target	Actual
2002-03	100	71
2001-02	100	52
2000-01	100	74
1999-00	500	40
1998-99	500	132

22. About the concrete steps taken by Company to encourage import substitution and to boost export production, the Committee have been informed that the Company has been closely interacting with its customers in the Strategic sectors to indigenous import substitution items. This has yielded in bulk orders for grades like C-103, Titanium rings for the Space sector, DMR 600, Welding electrodes for Defence requirements to name a few. The Company has also been interacting with EOU's to execute deemed export orders so that Midhani material can be used as input as against imported material.

23. When enquired whether the Company has identified any potential market for exporting its products, it has been informed to the Committee that Midhani products find application in the aerospace industries. Since the Aerospace industries are mainly in Europe (airbus-EADS) and USA these are

potential markets. Orders from developed countries for Indian products take time, as quality norms are very stringent. Quality audits and quality acceptances are needed before receipt of bulk orders.

The Company has achieved considerable success in getting companies in Europe to show interest in long term tie ups with Midhani for supply of titanium and its products. Airbus, France had visited Midhani for a quality audit and has found Midhani quality up to standards. Bohler Bleche, Austria and Aero metals, France visited Company and have initiated discussions for long term tie ups. Midhani material was forged at Firth Rixson, UK for the LCA programme as an import substitution for US material. The special metals and alloys manufactured by the Company find application in Aerospace application, Defence and specialised application in the General Engineering sector like spray metallizing application and for electronic applications. The Far East and Latin America are also potential markets, which the Company is working on.

24. The funds allocated for R&D activities and its percentage to the total expenditure during the last five years are as under :

(Rs. in crore)

YEAR	R&D EXPENDITURE	TOTAL EXPENDITURE	% of R&D Exp. to Total Exp.
1998-99	0.12	87.47	0.14
1999-00	0.63	106.43	0.59
2000-01	1.12	110.03	1.02
2001-02	0.66	98.98	0.67
2002-03 (Prov)	0.75	98.05	0.76

25. When enquired whether the expenditure incurred by the Company on R&D activities is in commensurate with the results achieved, the Committee have been informed that Midhani has an industrial R&D set up and is engaged in application oriented R&D activities. Developmental activities are essentially based on customers demand for new type of metals, alloys or products. Expenditure incurred during development is taken into account during costing, wherever developmental activities are involved. Therefore, the expenditure incurred by the Company on R&D activities is commensurate with the results achieved.

The Committee have also been informed that over the last five years, several new alloys for strategic application have been indigenously developed as import substitute. *Special stainless steel* such 440, 13-8Mo, 15-5 PH, 304L (NAG), 308L, 316W, 446, 32950. 312, 14x17H2, 430, 304LN, Gr 91, 16-8-2SS, 301, 202, etc. *Super alloys* such as 601, 690, 706, 718, etc. *Titanium alloys* such as PT1 M, PT7M, PT3V, Half alloy, etc were successfully developed and supplied to customers. Sales realised from developmental activities is much more than the expenditure incurred during their development.

26. The inventory level of the Company for the last six years is as given below:

Sl. No.	Item	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03 (Prov.)
1.	Raw Materials	8.07	17.28	8.98	16.45	11.28	9.00
2.	Consumables	6.00	5.31	5.40	5.83	6.25	6.00
3.	Spares	3.39	3.98	4.45	4.50	2.87	2.60
4.	Scrap	4.51	6.31	7.05	11.86	10.84	10.5
5.	Finished Goods	0.95	1.08	0.63	1.78	1.24	36.50
6.	WIP	28.54	28.86	30.73	30.84	34.25	
	Total	51.46	62.80	57.24	71.26	66.71	64.60

When enquired about the reasons for increase in the inventory level, the Committee have been informed as under:

- The reason for increase in Inventory is due to maintenance of Buffer Stock of imported Raw materials in the light of sanctions imposed by USA and European Countries due to Pokhran II and also due to scarcity of some materials in the world market, due to their strategic nature.
- Increased production and stocking of WIP and Finished Goods of regular grades for off-the-shelf supplies to various Customers.
- Long production cycle of about 1-1/2 to 2 years for certain items involving various intermediary/final operations inside/outside the Country.
- Various customers are contacting Midhani for development of certain grades on commercial lines. But after establishing the parameters, customers are resorting to imports, since the imports are cheaper compared to Midhani's costs.

27. On the question of quality control mechanism available in the Company, it has been informed to the Committee that Quality Control Department, headed by a DGM, ensures quality system requirements as per ISO 9000 standards. The Department is well equipped with state-of-art



testing and inspection facilities. The Quality System of the Company is approved by various inspection agencies mentioned below :

- Director General of Aeronautical Quality Assurance (DGAQA)
- Director General of Civil Aviation (DGCA)
- Direction General of Quality Assurance (DGQA)
- Department of Space
- Department of Atomic Energy (DAE)
- Source approval of Boeing Co., USA  
(For Titanium & Titanium Alloy products for their C-17 programme, MD series aircrafts)

There are various stages to ensure quality control which inter-alia include (i)Raw material inspection ; (ii) Surveillance of manufacturing process ; (iii) Stage and final inspection ; (iv) Sampling and Testing; (v) Calibration of Measuring Instruments; (vi) On line and product analysis; (vii) Quality Audit; and (viii) Management Review.

It has also informed to the Committee that Quality Audits are conducted once in six months. Management review of the quality management system is done twice in a year headed by Chief Executive in order to ensure correct functioning of the quality system as per the requirements of ISO standard. Based on such reviews planned corrective actions and preventive actions are taken with a view to improve the system on a continuous basis.

28. When asked about the complaints regarding quality of products received particularly from Ministry of Defence during the last three years, the information furnished to the Committee is given below :-

S.N o.	CUSTOMER	GRADE	SIZE (mm)	Remedial action
1.	HAL, NASIK	18XCH	4.4 Dia	Surface Lapping Problem. Midhani clarified the quality aspects. Customer yet to respond.
2.	BEL, Bangalore	Superni 750	0.4 x 240	Customer unable to use the component due to hardness. Material was called back, annealed and returned to the customer. The complaint was resolved.
3.	ARDE, Pune	MDN 155	Forging	Out of two forgings, customer made complaint on 1 No. Midhani clarified to the customer and they used the material. The complaint was resolved.
4.	Ordnance Factory, Trichy	MDN 172	110 Dia	Out of 47 Nos., 7 Nos. were having more run out 5-9 mm against 2 mm. Material was called back, straightened and returned to the customer. The complaint was resolved.
5.	Ordnance Factory, Trichy	MDN 172		Customer was unable to Machine due to hardness problem. Material was called back (29 Nos), heat treated and supplied to the customer. The complaint was resolved.
6.	Ordnance Factory, Ischapur	Investment Castings of Housings		Out of 4000 Nos. supplied, 1000 Nos. were rejected due to variation in hardness and blowholes. Customer adjusted the amount towards rejection.
7.	DRDL, Hyd	Superni 600	6 mm Dia	Circumferential scratches/grooves found. Material was called back, ground and supplied. The complaint was resolved.
8.	Ordnance Factory, Kanpur	H 95	Breech Ring	Dimension is low due to presence of Deep Forging radius mark on all the four corners. Midhani has given clearance for machining at Ordnance Factory. Feedback is awaited.
9.	FGF, Kanpur	Barrel Forgings	MDN 172	Rejected in Ultrasonic Testing after heat treatment. Customer wanted replacement of 7 Barrels, 5 Nos. have already been replaced and balance 2 Nos. are being replaced in a month.

29. As per the information furnished to the Committee, the Composition of the Board of Directors of MIDHANI is given below :-

Category	Name	Official Designation
<b>I. PART-TIME OFFICIAL DIRECTORS</b>		
Representing	1. Shri Rakesh Srivastava	Joint Secretary (HAL) DP & S, MOD
Administrative Ministry	2. Shri Abhijit Basu	Additional Financial Adviser & Joint Secy. Ministry of Defence (Finance)
<b>II. PART-TIME DIRECTORS:</b>		
	3. Shri K.P. Puri	Managing Director MIG Complex, Hindustan Aeronautics Limited, Nasik
	4. Dr. Dipankar Banerjee	Director, Defence Metallurgical Research Laboratory, Hyderabad.
	5. Shri R.K. Singh	The nomination of Shri Singh on the Board of MIDHANI was made when he was General Manager of Metal & Steel Factory, Ordnance Factory Board, Ishapore. Since Shri Singh superannuated on 31.01.2003 action is on hand to fill the vacancy.
<b>III. FUNCTIONAL DIRECTORS</b>		
	6. Chairman & Managing Director	Vacant *
	7. Dr. M. Nageswara Rao	C&MD (Officiating) & Director (P &M)
	8. Shri B.V. Krishnamurthy	Director (Finance)

(\*) CMD appointed w.e.f. 25.4.2003

30. When enquired whether the composition of the Board of Directors is in accordance with the DPE guidelines, the Committee have been informed that the Board of Directions, as indicated above is in accordance with the Department of Public Enterprise (DPE) Guidelines, as far as the strength of Functional Directors, Government Directors and Official part-time Directors is concerned. In so far as the category of Non-official Directors is concerned proposals for nomination have been made to the Administrative Ministry. Orders are awaited in the matter.

31. When asked about the vacancies on the Board of Directors of the Company, the Committee have been informed that there is no regular incumbent for the post of C&MD, since 26<sup>th</sup> March, 2003. The Director (P&M) is holding additional charge of the post of C&MD. The positioning of new incumbent is at advanced stage in the Ministry and the same will be filled up soon.

When enquired whether the powers given to the Board of Directors are adequate, the Committee have been informed that there are no serious drawbacks were found in the present delegation of powers of Board of Directors. However, the same is proposed to be taken up for a review when the regular incumbent in the post of C&MD joins the organisation.

32. The Committee have been informed that the manpower strength of the Company as on 1.4.2003 is 1288 comprising 256 Executives and 1032 Non-executives as against the total sanctioned strength of 1456 (1184 Non Executives + 272 Executives).

33. When asked whether any study has been conducted to assess the manpower requirements of the Company, the Committee have been informed as under :-

- i) Dastur & Company (Company's consultants in setting up the project) in their Engineering Report recommended a total manpower of 2045 (260 Executives and 1785 Non-Executives). The report did not cover some of the facilities which were not envisaged earlier viz. Tube Plant, KAPP, AMTL, Bio-Implants and several diversification projects etc.
- ii) Subsequently in the year 1989 National Productivity Council (NPC) while developing a suitable incentive scheme for non-executives have studied the manpower requirements of MIDHANI and recommended a total manpower of 1472 (267 executives and 1205 non-executives). The recommendations do not include the requirements of Tube Shop, Vacuum Investment Casting, welding electrode manufacturing plant, Bio-medical implants, etc.
- iii) In 1996 Administrative Staff College of India (ASCI) was assigned with the task of redefining the organizational structure, which will enable the Company to become more responsive to the changing economic environment and also the executive manpower assessment in various functional areas. ASCI recommended a total executive manpower of 320.
- iv) Regarding non-executives, the maximum manpower that was operated was 1264 in 1986 when the sales turnover was around Rs. 20 crores which has progressively increased and crossed Rs.100 crores by 1999-2000. The present non-executive strength is 1032.
- v) The manpower rationalization is being done on continuous basis to take care of the manning the additional facilities, in the areas of diversification and also to take care of the manpower that is required to coordinate the jobs, which are processed at several external work Centres. New processes and technology developments call for extra manpower, which are being managed presently with existing resources. Examples are Body Armour, welding electrode project, Bio-Implants, etc.
- vi) After the study by NPC the deployment of manpower in various functional areas have been readjusted by and large in line with the recommendations of NPC. ASCI have given

recommendations on various HR issues related to Executives, which are interlinked. Efforts are being made to recast the same to bring in more rationality and implement them.

34. About rationalisation of workforce of the Company, the Committee have been informed that as a part of efforts to rationalise the manpower strength in MIDHANI, recruitment of Executives and Non-Executives are made purely on need base through Newspaper Advertisement and local Employment Exchanges. The Committee have also been informed that during the last three years (1998-99 to 2000-2001), the strength of employees (Executives & Non-Executives) has come down by 75 from 1434 as on 31.3.1999 to 1359 as on 31.3.2001 due to resignations/retirement/death.

The Committee have further been informed that the Company extended Voluntary Retirement Scheme (VRS) in 2000 and 2002 and as a result, 56 employees (25 Executives and 31 Non-Executives) retired in the year 2000 and in the year 2002 another 68 employees (19 Executives and 49 Non-executives) retired. Thus bringing down the total number of employees to 1288 (Executives 256 and Non-Executives 1032).

The funds for the first phase of VRS in May 2000 amounting to Rs.223 lakh was generated from internal sources and for the second phase in March 2002, the funds of Rs. 274 lakh was taken from the financial institutions by way of loans.

35. When enquired about the Vigilance mechanism, the Committee have been informed that Midhani is a Schedule 'B' company with about 260 executives and 1030 Non-executives with 4 Regional Marketing Offices at Kolkata, Chennai, Mumbai and Delhi. For the first time the Government have

positioned a full time Chief Vigilance Officer (CVO) in Midhani from May 2002. Prior to that, Vigilance work is attended to by a part time CVO drawn from within the Company.

36. The table shows the number of cases received, disposed of and pending during the last three years :-

<b>Year</b>	<b>Opening Balance</b>	<b>No. of cases received</b>	<b>Total</b>	<b>No. of cases disposed</b>	<b>Pending</b>
2000-2001	-	16	16	5	11
2001-2002	11	4	15	12	3
2002-2003	3	9	12	3	9

The nature of pending cases is given below :

1. Suppression of factual information ;in employment application.
2. Smuggling of valuable Midhani material.
3. Cheating, tampering documents and impersonation in the payment of telephone bill.
4. Commissions and omissions committed by a Senior Official.
5. Complaint on non-issue of civil tender documents.
6. Irregularities in the tender for taxi hiring contract and supply of inferior vehicles.
7. Suppression of facts in the case of re-employment of a terminated employee.
8. Complaint on delayed payment of bills.
9. Violation of Purchase Policy.

The Committee have been informed that Shri MHS Babu, DGM (Materials) was found guilty in one case of demanding bribe and found guilty in two other cases involving irregularities in Purchase contracts. The services of Shri MHS Babu was terminated in 2001.

Shri S. Satyanarayana, Sr. Asstt., Purchase Department was found guilty in favoring firm running by his wife by issue of tender enquiries and other irregularities such as correction of tender offers. His services were terminated in August, 2001.



## **Recommendations/Observations of the Committee**

### **RECOMMENDATION NO.1**

#### **REQUIREMENT OF FUNDS FOR UPGRADATION/MODERNISATION**

The Committee note that MIDHANI went into commercial production in the year 1983. As the machinery/equipments installed is aging, the Company needs upgradation/modernisation and rationalization of certain processes keeping in view the technological improvements. The Committee further note that due to lack of funds, the Company has been unable to implement the upgradation/modernisation plan. The Committee are given to understand that for upgradation of old equipments and putting up the new state-of-art equipments, the Company has sent a proposal to the Ministry of Defence seeking financial assistance to the tune of Rs. 99.55 crore for implementing upgradation/modernisation plan as well as to implement new projects to cater to the strategic sectors. The Committee, therefore, recommend that the Government should take quick decision on the request of the Company and provide financial support to MIDHANI to enable it to achieve the status of a 'Strategic National Facility' for development and supply of strategic materials.

## **RECOMMENDATION NO.2**

### **EXEMPTION FROM CUSTOMS DUTY IN FAVOUR OF MIDHANI**

The Committee note that Mishra Dhatu Nigam Ltd. has not been granted Custom Duty exemption for various critical components imported by it, whereas other Defence Public Sector Undertakings such as Hindustan Aeronautics Ltd. etc. have been granted this exemption. Due to the non-availability of customs exemptions to the imported raw-materials, the prices of the finished products of MIDHANI have been much higher and therefore, not competitive in the market. This has adversely affected the sales of the finished products of the Company, thereby affecting its financial viability. The Committee note that there is also disparity in Customs duty structure relating to finished goods and raw materials imported, foreign suppliers have gained a competitive edge and the sale of commercial grade products from MIDHANI such as Heating Element Alloys, Powder Metallurgy products etc. has declined. The Committee, therefore, recommend that the Ministry of Finance should grant necessary customs duty exemption sought by MIDHANI for their products in national interest and also in the interest of financial viability of an indigenous defence production unit.

**RECOMMENDATION NO. 3**

**NATIONAL MISSION ON BIO MEDICAL IMPLANTS**

The Committee note that MIDHANI has been manufacturing Bio-medical implants which are not only required by the fighting forces in unfortunate circumstances but also by a large part of the civilian population. It has been brought to the notice of the Committee that MIDHANI has decided to mass-produce titanium bio-implants in order to substitute the prohibitively costly imported implants with much cheaper indigenous ones. For this purpose, the Committee are given to understand that the Company is working with Armed Forces Medical College and other pioneering bodies in the field of medical services, for developing various body implants conforming to Indian demographic conditions. The Committee further note that the Company has also been manufacturing Light-weight Armour of International standards for army for ballistic protection. To enable the Company to achieve its mission, the Committee urge the Government to render all assistance and help MIDHANI in becoming the main supplier of Bio-medical Implants and Light-weight Armour for armed forces and also for the Indian market. The Committee also recommend that the Government should set up a National Mission on Bio-medical Implants and Ballistic Protection with MIDHANI as the nodal agency, in view of its technical competence to produce these products at competitive prices.

**RECOMMENDATION NO. 4**

**PREFERENCE TO MIDHANI PRODUCTS**

The Committee note that there is a programme for Transfer of Technology for the Manufacture of SU-30 Fighter Planes at HAL and also for the Manufacture of T-90 Tanks in the Ordnance Factories. The Committee note that MIDHANI has the necessary technical competence to provide inputs for these projects and also for supplying finished components for T-90 tanks, Kaveri engine etc, as a key supplier. The Committee recommend that MIDHANI should be associated as 'Partner' in these venture right from the beginning. The Committee also recommend that the Government should issue a directive to all the Defence PSUs, DRDO units and Ordnance Factories to use MIDHANI capabilities in all their manufacturing activities and also to enable them stock-pile raw materials for exigencies so that India becomes self-reliant in defence requirement.

**RECOMMENDATIONS NO. 5**

**INCLUSION OF MIDHANI SPECIAL STEELS WITHIN THE PURVIEW OF 'BUY INDIAN ACT' FOR STEEL INDUSTRY.**

The Committee are given to understand that the Government are enacting a legislation on 'Buy Indian Act' for steel Industry. The Committee note that MIDHANI has developed special steels which are being used for Missiles, Space Vehicles, Tanks, Guns, Power Plants, etc. The Committee, therefore, recommend the Government may consider inclusion of MIDHANI special steel within the purview of the proposed legislation on 'Buy Indian Act' for the Steel Industry.

**ANNEXURE - I**

**TOUR PROGRAMME OF THE COMMITTEE ON PUBLIC UNDERTAKINGS  
TO HYDERABAD, VISAKHAPATNAM AND CHENNAI FROM 12<sup>TH</sup> TO 16<sup>TH</sup>  
APRIL, 2003, AS ACTUALLY PERFORMED**

( MEMBERS ASSEMBLED AT HYDERABAD )

<b>DATE AND DAY</b>	<b>TIME</b>	<b>VISIT &amp; DISCUSSION</b>
12.04.2003 (SATURDAY)	1600 hrs	Discussion with the officers of RITES Ltd.
	1800 hrs	Discussion with the officers of Mishra Dhatu Nigam Ltd.
<b>( NIGHT HALT AT HYDERABAD )</b>		
13.04.2003 (SUNDAY)	0615 hrs	Departure for Visakhapatnam by CD-7561 (0730 Hrs.)
	0830 hrs	Arrival at Visakhapatnam
	1030 hrs	Discussion with the officers of Rashtriya Ispat Nigam Ltd. (Audit Para Nos. 21.6.1 of C&AG's Report No. 3 of 2002)
	1200 hrs	Discussion with the officers of Bharat Heavy Plates & Vessels Ltd.
<b>( NIGHT HALT AT VISAKHAPATNAM )</b>		
14.04.2003 (MONDAY)	0900 hrs	Discussion with the officers of Hindustan Shipyard Ltd.
	1015 hrs	Discussion with the officers of Dredging Corporation of India Ltd.
	1330 hrs	Departure for Chennai by CD 7477 (1505 hrs)
	1610 hrs	Arrival at Chennai
	1800 hrs	Discussion with the officers of Bharat Petroleum Corporation Ltd. (Audit Para Nos. 16.1.1 & 16.1.2 of C&AG's Report No.3 of 2002)
<b>( NIGHT HALT AT CHENNAI )</b>		
15.04.2003 (TUESDAY)	0900 hrs	Discussion with the officers of Chennai Petroleum Corporation Ltd. (Audit Para No.16.2.1 of C&AG's Report No.3 of 2002)
	1045 hrs	Discussion with the officers of Shipping Corporation of India Ltd.

**DISPERSAL**

**ANNEXURE – II**

**COMPOSITION OF THE COMMITTEE ON PUBLIC UNDERTAKINGS  
WHICH VISITED HYDERABAD, VISAKHAPATNAM AND CHENNAI  
FROM 12<sup>TH</sup> TO 15<sup>TH</sup> APRIL, 2003**

**MEMBERS, LOK SABHA**

1. Prof Vijay Kumar Malhotra, Chairman
2. Shri Ram Tahal Chaudhary
3. Shri K. E. Krishnamurthy
4. Dr. Prasanna Kumar Patasani
5. Shri Tarit Baran Topdar
6. Shri V. Vetriselvan

**MEMBERS, RAJYA SABHA**

7. Sh. Kalraj Mishra
8. Shri Satish Pradhan
9. Sh. K.Kalavenkata Rao
10. Sh. Lalitbhai Mehta

**SECRETARIAT**

1. Shri S Bal Shekar, Director
2. Shri Raj Kumar, Under Secretary

