

**MINISTRY OF SHIPPING**

**CHAPTER IX**

*Hindustan Shipyard Limited and Cochin Shipyard Limited*

*Ship repair activity in Indian dockyards*

*Executive Summary*

Hindustan Shipyard Limited (Hindustan Shipyard), Visakhapatnam was set up in 1941 and it established ship repair unit in 1971. Turnover from the ship repair activity was varying from Rs. 87.90 crore to Rs. 144.13 crore against the total turnover of the Company which was ranging between Rs. 225.30 crore and Rs. 395.81 crore during 2004-05 to 2008-09.

Cochin Shipyard Limited (Cochin Shipyard) incorporated in March 1972 commenced ship repair operations in 1981. The ship repair turnover of the Company was varying from Rs. 148.02 crore to Rs. 270.06 crore against the total turnover which ranged between Rs. 276.48 crore and Rs. 1256.21 crore during 2004-05 to 2008-09.

The performance audit of ship repair activity of these companies for the period 2004-05 to 2008-09 was conducted to assess efficiency and economy of their ship repairs operations and their ability to expand the ship repair business in domestic as well as international markets. The deficiencies noticed in ship repair activities in these companies were as below:

- The turnover of Indian ship repair industry during the years 2004-05 to 2008-09 ranged between Rs. 316.07 crore and Rs. 490.38 crore. Though Hindustan Shipyard and Cochin Shipyard being the leading shipyards in the country had major share ranging between 73.74 per cent and 91.36 per cent, there was no defined action plan to capture market potential.
- Out of Rs. 970.67 crore of ship repair expenditure by Shipping Corporation of India during 2004-05 to 2008-09, Rs. 849.20 crore, i.e., 87.49 per cent was spent for repairs in foreign yards.
- Repair business of Hindustan Shipyard and Cochin Shipyard from foreign ships was Rs. 44.25 crore (31 ships) and Rs. 60.23 crore (5 ships) respectively during this period.
- Hindustan Shipyard and Cochin Shipyard did not revamp or modernise the infrastructure in tune with market potential.

- Hindustan Shipyard received Rs. 8.27 crore from the GoI for modernisation of ship repair facility against which it could utilise only Rs. 1.19 crore even after lapse of 5 to 46 months.
- No benchmarks were fixed for key activities such as steel renewal, sand/grit blasting, painting.
- In case of Hindustan Shipyard 77 orders were reviewed of which the Company executed 62 orders with time overrun ranging from 1 to 319 days which resulted in loss of Rs. 10.91 crore to the Company. In Cochin Shipyard out of 177 orders 98 orders were completed with time overrun leading to a loss of Rs. 2.73 crore.
- Realisation of the dues did not take place within the agreed credit period. In case of Hindustan Shipyard there were delays ranging between 6 and 882 days and in case of Cochin Shipyard it was up to 350 days after allowing the agreed credit period.

### **Summary of recommendations**

#### ***The Companies should:***

- Make efforts to fully explore the Indian ship repair market potential by adopting suitable marketing strategy and take positive steps to capture the foreign ship repair market.*
- Fix benchmarks for the key activities of the ship repair industry to reduce repair cycle time.*
- Ensure timely completion of repairs by effective planning to turnout more ships to increase ship repair revenue.*
- Stipulate time frames for raising invoices and ensure internal compliance to avoid blockage of working capital.*
- Ensure realisation of repair bills within the agreed credit periods and incorporate suitable clauses in the contracts to recover interest in case of belated payments by the parties.*

#### ***Hindustan Shipyard should***

- Utilise Government funds for the intended purposes within the stipulated period to derive the envisaged benefits.*
- Maintain proper records and comprehensive database of enquiries received, quotes submitted, orders lost with reasons thereof and orders firmed up.*
- Accredit 'ship repair' as a separate cost and profit centre.*

### **9.1.1 Introduction**

Hindustan Shipyard Limited (Hindustan Shipyard), Visakhapatnam was set up in 1941 by Scindia Steam Navigation Company and was later taken over by the Government of India (GOI) in 1952. It became a fully owned Government Company from July 1961. The Company established Ship Repair Unit (SRU) in 1971 and an exclusive division to undertake Submarine Repairs (Retrofit) in 1997.

Cochin Shipyard Limited (Cochin Shipyard), incorporated in March 1972, was established as a green field shipyard in technical collaboration with Mitsubishi Heavy Industries of Japan and is presently a wholly-owned GOI enterprise. It commenced ship repair operations in 1981. It is a Category-I Mini Ratna Company.

Hindustan Shipyard and Cochin Shipyard are under the administrative control of the Ministry of Shipping (Ministry). The details of ship repair facilities available in both the companies are indicated in *Annexure XXXII*.

### 9.1.2 Performance of the Companies

The total turnover *vis-à-vis* ship repairs turnover of Hindustan Shipyard and Cochin Shipyard during 2004-05 to 2008-09 is given below in **Table 9.1**:

**Table 9.1**

(Rs. in crore)

Company	2004-05		2005-06		2006-07		2007-08		2008-09	
	TT	ST	TT	ST	TT	ST	TT	ST	TT	ST
<b>Hindustan Shipyard Limited</b>	225.30	135.12	243.58	87.90	327.63	92.14	384.52	108.46	395.81	144.13
<b>Cochin Shipyard Limited</b>	276.48	148.02	373.53	151.27	719.74	241.53	833.79	252.14	1256.21	270.06

*TT – Total turnover of Company; ST – Ship repair turnover of Company*

The total profit and profit from ship repair activity of Hindustan Shipyard and Cochin Shipyard during 2004-05 to 2008-09 is given in the following **Table 9.2**:

**Table 9.2**

(Rs. in crore)

Company	2004-05		2005-06		2006-07		2007-08		2008-09	
	TP	SP	TP	SP	TP	SP	TP	SP	TP	SP
<b>Hindustan Shipyard Limited<sup>1</sup></b>	(7.89)	10.81	6.28	29.05	(75.90) <sup>2</sup>	17.37	23.48	39.11	(136.73)	44.41
<b>Cochin Shipyard Limited</b>	16.86	20.94	25.45	18.09	85.77	15.74	149.40	23.44	247.63	80.01

*TP – Total Profit / (Loss) of Company; SP – Ship repair profit of Company*

Ship repair segment is the only activity in Hindustan Shipyard which made profits consistently. Cochin Shipyard also made profits consistently from ship repairs activity.

### 9.1.3 Ship repair industry scenario

Ship, being a floating structure, requires regular inspection and maintenance for smooth and safe functioning during ocean voyages and also during cargo handling operations at Ports. Ships are also governed by scheduled periodic repairs as per the guidelines formulated by the Classification Society and other Statutory Bodies. Accordingly, Ship

<sup>1</sup> Profit from ship repair activity has been arrived at by appropriating the unallocated overheads in the ratio of overheads of respective segment (*viz.*, shipbuilding, ship repair and retrofit segments)

<sup>2</sup> Excluding extra ordinary/prior period adjustments on account of capital restructuring

repair yards generally have a continuous and consistent flow of business with predictable revenue generation. As such, the ship repair industry is evergreen.

The annual fleet of the domestic ships operated during the last five years ending 31 March 2009 was on increasing trend which is given below in **Table 9.3**:

**Table 9.3**

Year	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Total fleet</b>	669	721	776	850	902

The promotion of the ship repair industry is of paramount importance in Indian context due to:

- (i) the industry being labour-intensive will act as a conduit for providing employment;
- (ii) the growth of the industry will contribute to the growth in related industry like steel and other industries such as electronics and chemicals; and
- (iii) lays foundation for development of an independent shipbuilding and ship repair industry.

## **9.2 Scope of Audit**

Performance audit covers the ship repair activity undertaken by Hindustan Shipyard and Cochin Shipyard during the five year period from 2004-05 to 2008-09.

## **9.3 Audit objectives**

The overall objective of performance audit was to assess whether the principles of economy, efficiency and effectiveness were followed in ship repair operations. Detailed audit objectives were to assess and evaluate:

- Goals and responsibilities set up to improve market share of the Companies in ship repair business;
- Activities for revamping and modernisation of the ship repair facilities and other ancillary facilities;
- Benchmarks fixed by the industry and companies for execution of different operations of ship repair activity;
- System of response to enquiries, acceptance and firming up of ship repair orders;
- Execution of ship repair orders; and
- Realisation of contractual dues.

## **9.4 Audit criteria**

The main audit criteria were:

- Goals set forth by Govt. of India in its Five Year Plans (FYP) for Indian shipyards and reports of the working group of the Planning Commission;
- Memorandum of Understanding (MOU) signed by the respective Company with GOI;

- Corporate plans and policies, technical manuals, delegation of powers, minutes of board meetings, cost sheets, annual reports, industry journals, bulletins *etc*;
- Turnover per occupancy day of dry dock;
- Revamping and modernisation plans;
- Terms and conditions of contracts, government sanctions; and
- Various Consultancy and Management reports.

### **9.5 Audit methodology and sample**

The audit methodology included examination of related documents and discussions with Managements. Audit held entry conferences with Hindustan Shipyard and Cochin Shipyard wherein the audit objectives were explained to the respective Managements. Audit also held exit conferences with the Managements to explain the audit findings.

During the period under audit, Hindustan Shipyard had executed 151 repair orders out of which 77 orders were selected for review using Stratified random sampling method. In case of Cochin Shipyard for evaluating and analysing the time taken for the preparation and settlement of invoices for the ships repaired during the period under review, audit adopted random sampling of the invoices each involving Rs. 0.50 crore and above. For other areas, entire population was considered for analysis.

### **9.6 Acknowledgement**

Audit acknowledges the cooperation and assistance extended at different levels of the Companies, which facilitated the completion of this performance audit.

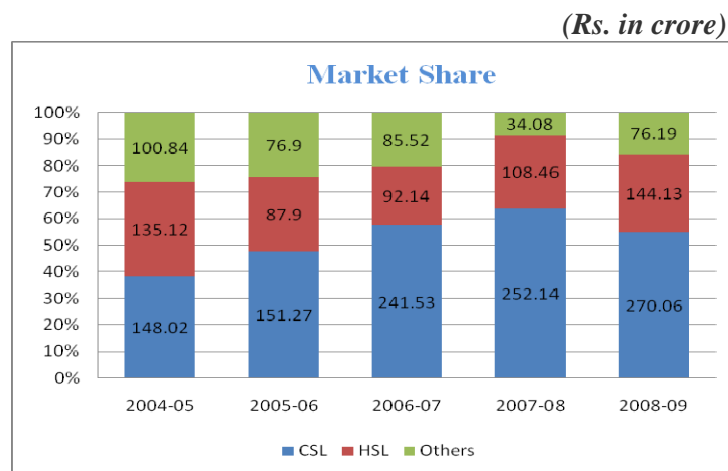
### **9.7 Audit findings**

Audit findings as a result of performance audit of ship repair activity of Hindustan Shipyard and Cochin Shipyard are discussed in the succeeding paragraphs:

#### **9.7.1 Market Share**

The turnover of Indian ship repair industry during the years 2004-05 to 2008-09 was Rs. 383.98 crore, Rs. 316.07 crore, Rs. 419.19 crore, Rs. 394.68 crore and Rs. 490.38 crore respectively (*Annexure XXXIII*). Hindustan Shipyard and Cochin Shipyard being the leading shipyards in the country had major share ranging between 73.74 *per cent* and 91.36 *per cent* during the review period.

Chart 9.1



From the above chart it is evident that the market share of Cochin Shipyard increased consistently, excepting 2008-09, whereas the share of Hindustan Shipyard was not steady and reduced in the subsequent years as compared to its share of 2004-05. The gap in the market share between Hindustan Shipyard and Cochin Shipyard during 2004-05 which was three *per cent* widened in the subsequent four years, the maximum being 36 *per cent* in 2007-08. This was mainly due to undertaking repair work of oil rigs of ONGC and air craft carrier of Indian Navy on regular basis by Cochin Shipyard, whereas Hindustan Shipyard undertook the repairs of rigs only during 2004-05.

In this connection it was observed that:

- No concrete action plan was drawn by Hindustan Shipyard and Cochin Shipyard to capture the huge market potential.
- Even though Working Group<sup>3</sup> envisaged undertaking of repair business of Indian ships within the country, there was no effective action plan by these Companies to achieve this objective. This is evident from the quantum of repair work carried out at foreign yards. Out of Rs. 970.67 crore of ship repair expenditure by Shipping Corporation of India (SCI) during 2004-05 to 2008-09, Rs. 849.20 crore, *i.e.*, 87.49 *per cent* was spent for repairs in foreign yards.
- Hindustan Shipyard stated (January 2010) that it had not repaired SCI bulkers, tankers and container ships from 2004-05 to 2008-09 as SCI was not inviting quotations from Hindustan Shipyard.
- There exists a market potential of Rs. 100 crore per annum from the repair of Naval and Coast Guard Vessels. Hindustan Shipyard, however, did not quote for Coast Guard Vessels in 2007-08 and 2008-09 on the premise that these vessels were not profitable. Considering the profit of 22 *per cent* on four Coast Guard vessels repaired during 2004-05 and 2005-06, the Management version that repair

<sup>3</sup> Working Group for shipbuilding and ship repair industry for the eleventh five year plan (2007-2012)

business of these vessels was not profitable lacks justification. In fact, no cost-benefit analysis was carried out before taking such stance.

- As per the Working Group report, the annual repair market from repair of foreign vessels would be Rs. 1,150 – Rs. 1,400 crore. Audit, however, observed that Repair business of Hindustan Shipyard and Cochin Shipyard from foreign ships was Rs. 44.25 crore (31 ships) and Rs. 60.23 crore (5 ships) respectively during the review period. Thus, potential foreign ship repair business remained largely untapped.
- Cochin Shipyard in its corporate plan (2005-15), recognised the existence of potential international market for ship repairs due to its strategic location but the Company failed to capitalise the same. It was not successful in as many as 23 global tenders for repair business (Rs. 202.89 crore) including eight foreign ships (Rs. 26.69 crore) during the year 2007-08 and 2008-09.

***Recommendation No. 9.1***

***The Companies should:***

- (i) ***Make efforts to fully explore the Indian ship repair market potential by adopting suitable marketing strategy.***
- (ii) ***Take positive steps to capture the foreign ship repair market.***

***9.7.2 Revamping and modernisation of infrastructure***

***- Need for additional facilities***

The Eleventh FYP emphasised creation of additional facilities as a measure necessary for promotion and growth of the ship repair industry. Audit, however, observed that there was no defined action plan in this regard as discussed below:

***9.7.2.1 Failure to utilise Government funds for revamping***

Hindustan Shipyard, from time to time, made proposals seeking the financial assistance from Ministry for revamping / improvement of ship repair facilities. Sequel to these proposals GOI released funds in the form of interest bearing loan during 2004-05 to 2008-09. The details of projections, requisitions, sanctions, purposes and utilisation of Plan Funds from GOI relating to ship repair unit during the review period are given below in **Table 9.4:**

Table 9.4

(Rs. in crore)

Year	Requirement projected by ship repair division of Hindustan Shipyard Limited	Projection by Hindustan Shipyard Limited to GoI	Funds received from GoI	Utilisation completed	Details of items planned for replacement/modernisation
2004-05	5.00	3.18	3.18	Nil	Workshop machinery and Caisson gate
2005-06	5.00	1.19	1.19	1.19	DG Set, Small tools, compressors, forklifts, mobile cranes & pipelines
2006-07	5.00	1.50	1.50	Nil	Dewatering pump
2007-08	67.03	4.00	0.60		
2008-09	46.74	38.00	1.80	Nil	Work shop machinery, small tools and refurbishment of cranes
<b>Total</b>	<b>128.77</b>	<b>47.87</b>	<b>8.27</b>	<b>1.19</b>	

- As per terms of sanction by GOI, the funds received during 2004-05 to 2008-09 were to be utilised for the intended purposes within a period of 4 to 14 months of their receipt. Hindustan Shipyard, however, did not utilise 86 *per cent* of funds received from GOI for achieving improvement of ship repair facilities even after expiry of 5 to 46 months. The Ministry did not insist for utilisation certificates to ensure that the funds released were utilised for the intended purpose.
- The internal projections of 2007-08 and 2008-09 for augmentation of infrastructure at Dolphin Jetty (Rs. 4.00 crore) and East Quay (Rs. 20.55 crore), replacement of six EOT/ELL<sup>4</sup> cranes (Rs. 67 crore) that were installed 30 years ago and procurement of new water blasting equipment (Rs. 2.5 crore) were not submitted to Ministry. Resultantly, the required expansion and renovation plans did not materialise.

Hindustan Shipyard Limited stated (October 2009) that it was committed to utilise more than the amounts released by GOI during 2004-05 to 2008-09.

The reply is not convincing as the time limits stipulated were not on commitments but on utilisation of the funds for the intended purposes.

**9.7.2.2** The Board of Directors of Cochin Shipyard sought approval of Ministry (December 2007) to expand the capacity of its dry dock from the existing 1.25 lakh DWT to 2 lakh DWT by raising funds through Initial Public Offerings of 2.4 crore equity shares. The approval of the Ministry was awaited (December 2009).

<sup>4</sup> Electrically operated trolley / Electrical level luffing



**Recommendation No. 9.2**

***Hindustan Shipyard should utilise Government funds for the intended purposes within the stipulated period to derive the envisaged benefits.***

**9.7.3 Non-fixation of benchmarks for ship repair operations**

According to working group report, the capacity/productivity in Indian yards for steel renewal and sand/grit blasting was far below when compared to foreign yards in the neighbourhood.

It was observed that Hindustan Shipyard and Cochin Shipyard did not fix any benchmark for key activities such as steel renewal, sand/ grit blasting, painting of ship repair. In the absence of benchmarks, it is not possible to ascertain whether the repair operations were carried out economically and efficiently.

**Recommendation No. 9.3**

***The Companies should fix benchmarks for the key activities of the ship repair industry to reduce repair cycle time.***

**9.7.4 Firming up of orders**

**9.7.4.1 Deficiencies in the system of firming up orders**

According to order of the CMD of Hindustan Shipyard, effective from April 2004, the enquiries received for ship repairs and other allied business activities shall be put up to him for a decision. But this was not complied. Hindustan Shipyard did not have a system of maintaining a database of enquiries received and follow-up action thereon. Resultantly, there was no monitoring in Hindustan Shipyard of the system of firming up of orders.

**Recommendation No. 9.4**

***Hindustan Shipyard should maintain proper records and comprehensive database of enquiries received, quotes submitted, orders lost with reasons thereof and orders firming up.***

**9.7.5 Execution of ship repair orders**

**9.7.5.1 Avoidable loss due to time overrun**

Audit observed that out of 77 repair orders (2004-05 to 2008-09) reviewed, Hindustan Shipyard executed 62 orders with time overrun ranging from 1 to 319 days. The time overrun was due to the delays in (i) procurement of material, (ii) sub-contracting and off-loading jobs and (iii) finalisation of steel renewal contract. Hindustan Shipyard owned the responsibility of time overruns in 24 orders and incurred a loss of Rs. 10.91 crore on account of Liquidated Damages (LD) (Rs. 9.87 crore), waiver of berthing charges (Rs. 0.78 crore) and service charges (Rs. 0.26 crore).

Hindustan Shipyard while accepting the delay stated (October 2009) that, business conditions were not ideal to achieve zero LD.

The reply is not convincing, considering the deficiencies in procurement as well as off-loading which in turn significantly contributed to time overrun of ship repair orders.

Out of 177 orders executed during the last five years ending 31 March 2009, Cochin Shipyard completed 98 repair jobs with time overrun. The time overrun was due to the delays in (i) obtaining approval from ship owners for carrying out repair works involving additional jobs, (ii) procurement of machineries and spares for the ships from the original equipment manufacturers, (iii) procurement of additional materials for want of advance payments *etc.* Cochin Shipyard accepted for liquidated damages of Rs. 2.73 crore levied in eight cases due to excess time taken over and above the agreed time.

Cochin Shipyard replied (December 2009) that necessary steps had been taken to contain the delay in the best possible manner.

#### **9.7.5.2 Execution of ship repair orders without proper planning**

As per the instructional order (April 2004) of CMD, the Management is required to finalise repair strategy, fund requirement, procurement plan of spares, selection of sub-contractors, estimated man-hours required and a PERT chart and obtain approval of CMD before commencement of each repair order. There was no evidence on record that these directions were complied with in any of the 77 orders reviewed.

Hindustan Shipyard Limited stated (November 2009) that though the instructional order effective from April 2004 was fulfilled by Ship Repair Division, no proper records were maintained to that effect for submission to audit and relevant records would be maintained from 2009-10 onwards.

#### **9.7.5.3 Loss due to poor performance**

The tenders for repair of dredgers floated by Dredging Corporation of India Limited (DCI) stipulated that the previous performance<sup>5</sup> would be factored for evaluation of the price bids. In three tenders floated by DCI, though Hindustan Shipyard's quoted prices (Rs. 21.56 crore) were lower by 10 to 56 *per cent* compared to the prices (Rs. 26.22 crore) quoted by its foreign competitor, Hindustan Shipyard had to offer discounts of Rs. 8.48 crore for repair of the dredgers<sup>6</sup>, because of poor performance factor due to longer cycle time taken by Hindustan Shipyard Limited in previous repair orders.

Hindustan Shipyard Limited stated (October 2009) that considering its poor performance factor discounts were offered to get the orders.

#### **9.7.5.4 Non-enforcement of contractual clauses**

In off-loading contracts for steel renewal works, Hindustan Shipyard stipulated a norm for scrap at five *per cent* of the steel issued to the contractor. The contract also provided that a contractor should furnish a reconciliation statement of steel issued and consumed along with each bill submitted for releasing payments. Though Hindustan Shipyard had issued 3886.13 tonnes of steel to contractors valuing Rs. 14.97 crore during the last three years ending March 2009, neither the contractors furnished nor did Hindustan Shipyard insist for compliance of the contractual clause.

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<sup>5</sup> Calculated by dividing the "actual time taken" by the "contractual repair period" averaged for 3 drydocks carried out at that Yard.

<sup>6</sup> executed between September 2006 and October 2008

Hindustan Shipyard Limited stated (November 2009) that reconciliation of steel pointed out by Audit was in progress.

This indicates failure of internal controls leading to payments to the contractors without reconciliation. Consequently, the Company was deprived of the opportunity to recover the value of excess generated scrap, if any, over the norm from the contractors.

***Recommendation No. 9.5***

***The companies should ensure timely completion of repairs by effective planning to turnout more ships to increase ship repair revenue.***

***Hindustan Shipyard should accredit 'ship repair' as a separate cost and profit centre.***

**9.7.6 System of billing and realisation of contractual dues**

**9.7.6.1 Delays in raising of invoices**

There was no time frame laid down for raising invoices both in Hindustan Shipyard and Cochin Shipyard. The delays in raising invoices are discussed in the succeeding paragraphs.

In 71 out of 77 orders executed by Hindustan Shipyard, there were abnormal delays up to 714 days in presentation of 147 invoices (Rs. 342.33 crore) after completion of repairs resulting in avoidable loss of interest of Rs. 11.27 crore. Despite persistent delays, Hindustan Shipyard did not devise a mechanism to identify and prevent delays.

Hindustan Shipyard, while accepting the delays, stated (October 2009) that computerisation was now introduced and officers were clearly instructed to clear the bills in time bound manner.

In case of Cochin Shipyard, there were delays upto 133 days<sup>7</sup> in presentation of 111 invoices (Rs. 300.80 crore) after completion of repairs resulting in loss of interest of Rs. 1.72 crore<sup>8</sup>.

Cochin Shipyard stated (December 2009) that the minimum time required for raising the invoices was 30 days.

The reply is not acceptable as it was able to raise 22 and 48 invoices valuing Rs. 23.37 crore and Rs. 112.70 crore within 10 days and 11 - 30 days respectively.

**9.7.6.2 Delays in realisation of invoices**

The payment terms with the vessel owners provided for a definite credit period. There were delays ranging between 6 and 882 days in realisation of dues after allowing the agreed credit period (30 to 120 days) from the dates of raising the bills, which were delayed. There was no proper pursuance to ensure that the dues are collected within the agreed periods. Consequently, Hindustan Shipyard suffered a loss of Rs. 6.50 crore on account of interest.

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<sup>7</sup> after allowing 7 days from the date of completion of work order.

<sup>8</sup> Calculated at 6 per cent per annum as against average rate of 6.65 per cent earned on term deposits.

Hindustan Shipyard stated (October 2009) that there was no delay in realisation of outstanding dues from all other owners except DCI and it was pursuing with DCI for realisation of dues.

The reply is not convincing. Though Rs. 13.93 crore from DCI and Rs. 5.09 crore from other parties were outstanding over six months to five years as on 31 March 2009, there was no system by which the outstanding dues of Hindustan Shipyard are subjected to review by its Board of Directors.

In case of Cochin Shipyard, excess time taken by vessel owners (31 cases) over and above agreed time for settling the invoices (Rs. 165.38 crore) was upto 350 days. This resulted in loss of interest of Rs. 2.26 crore in respect of 31 repair jobs.

Cochin Shipyard stated (December 2009) that the delay in settlement was a matter of concern.

***Recommendation No. 9.6***

***The companies should:***

- (i) Stipulate time frames for raising invoices and ensure internal compliance to avoid blockage of working capital.***
- (ii) Ensure realisation of repair bills within the agreed credit periods and incorporate suitable clauses in the contracts to recover interest in case of belated payments by the parties.***

**9.8 Conclusion**

There was no defined action plan to capture market potential assessed by Eleventh FYP. Hindustan Shipyard and Cochin Shipyard could neither capture domestic market in totality nor could make a major dent in the international business of ship repairs. Hindustan Shipyard and Cochin Shipyard being the major players in the country did not revamp or modernise the infrastructure in tune with market potential. Delays in execution of contracts due to delay in procurement of material and release of job orders led to payment of liquidated damages and waiver of berthing charges. No benchmarks were fixed for key activities such as steel renewal, sand/ grit blasting, painting. There were abnormal delays in raising invoices on customers. This apart, in Hindustan Shipyard and Cochin Shipyard, the realisation of the dues did not take place within the agreed credit period.

The matter was reported to the Ministry in February 2010; their reply was awaited (March 2010).