

REPORT

XIV

DISINVESTMENT COMMISSION

SEPTEMBER
2002

‘Trikoort - I’, IInd Floor
Bhikaiji Cama Place, R K Puram
New Delhi - 110066

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Note: The Tables contained in this Report are based on information received from the Management of the PSUs.

PART - A

INTRODUCTION

The Disinvestment Commission has been reconstituted vide Government of India, Ministry of Disinvestment Resolution No.11012/1/2000-Adm dated 24th July, 2001. The composition of the Commission is as follows:

1. Dr. R.H. Patil, Part-time Chairman
2. Shri N.V. Iyer, Part-time Member
3. Shri T.L. Sankar, Part-time Member
4. Dr. V.V. Desai, Part-time Member
5. Prof. K.R.S. Murthy, Part-time Member

Shri Amitabha Bhattacharya, IAS has been appointed as Member Secretary of the Commission from 1st August, 2002 vide Notification No.12011/3/2002-Adm dated 1.8.2002 vice Shri G. Ganesh, IAS.

Government of India has decided to refer all "non-strategic" Public Sector Undertakings including subsidiaries (excluding IOC, ONGC & GAIL) to the Disinvestment Commission for it to prioritize, examine and make recommendations to the Government taking into consideration the existing Government policy, as articulated on 16th March, 1999 and the budget speeches of Finance Minister from time to time. It was also decided that for prioritisation, the following criteria will be observed:

- (i) Where disinvestments in PSEs would lead to large revenues to the Government;
- (ii) Where disinvestment can be implemented with minimum impediments and in relatively shorter time span; and
- (iii) Where continued bleeding of Government resources can be stopped earlier.

Accordingly, the Commission is currently examining a number of PSEs.

The Commission made recommendations in respect of 58 PSEs which had earlier been referred to it by the Government (1996-1999). Out of these 58 PSEs, following four were referred back to the Commission for a fresh review:

- (i) Neyveli Lignite Corporation Ltd. (NLC)
- (ii) Manganese Ore (India) Ltd. (MOIL)
- (iii) Rail India Technical & Economic Services Ltd. (RITES)
- (iv) Projects & Equipment Corporation Ltd. (PEC)

The Commission submitted its recommendations in respect of these four PSEs to the Government in January, 2002 (Report XIII). Government has already taken the decision to disinvest 51% shares in MOIL.

This Report (XIV) contains recommendations in respect of the following four Public Sector Enterprises:

- (i) IRCON International Ltd.
- (ii) Central Inland Water Transport Corporation Ltd.
- (iii) Cochin Shipyard Ltd.
- (iv) Hindusthan Shipyard Ltd.

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PART - B

2. SPECIFIC RECOMMENDATIONS

2.1 IRCON INTERNATIONAL LTD.

Introduction

IRCON International Limited (IRCON), earlier known as Indian Railway Construction Company Ltd., was established in 1976 under the Ministry of Railways, to carry on business relating to railway and other construction and related activities. Its main activities include laying of rail tracks, electrification of railway lines, construction of highways, bridges and airport runways, signalling and telecommunication works etc. Currently, IRCON is primarily a construction company involved in the field of railways, railway electrification, railway signalling & telecom, highways and bridges, electrical sub-stations, buildings, etc.

Over the last few years, IRCON concentrated more on railways and highways as its main fields of activity. In 2000-01, the share of railways and highways in IRCON's revenues has been around 80%.

IRCON's key client in India is the Indian Railways, which has provided IRCON with bulk of its domestic railway business. Some of its other clients include NHAI, NOIDA, Delhi Metro Rail Corporation, Damodar Valley Corporation, GoAP, etc.

IRCON has also undertaken railway and other projects in countries such as Malaysia, Bangladesh, Syria, Iran, U.K. etc. and its key foreign clients include Malaysian Railways, Roads and Highways Department.

The company has an authorised share capital of Rs. 250 mn, with paid-up share capital of Rs.49.5 mn. 99.73% shares are held by Government of India, 0.25% by UTI and 0.02% by Bank of India Mutual Fund.

The company is listed on the Mumbai and Delhi Stock Exchanges. The shares are not traded frequently.

Industry Analysis

Industry Size

It is estimated that the construction industry accounts for around 4.5-5% of India's GDP and had a size of around Rs. 120,000 crore in 2001-02 (current prices). Its

performance has a high degree of direct correlation with India's GDP and hence, is affected by the general level of economic activity in the country.

Out of more than 2800 construction companies in the country, 10 are in the public sector. Recently, the sector has been opened to foreign players. As a result, international construction companies have begun to enter the sector in India, mainly through joint ventures or consortiums with the Indian players. The entry of foreign players is expected to improve efficiency, capital investments and technological levels, but it could also be a threat to domestic players a large number of which are small companies using labour intensive, outdated technology and equipment.

Railways

Railway transportation in India, managed solely by the Indian Railways, covers over 62,000 route kms., over 80,000 kms. of running tracks and nearly 7000 stations. Railway transport has been classified as "strategic" from the point of view of disinvestment,

The total plan outlay for the railway sector increased from Rs. 2670 mn in the first plan to Rs. 454,130 mn in the ninth plan. The high growth in railway investments over the period 1992-93 to 1999-00 has been in the areas of doubling and signalling & telecom. During the period 1997-98 to 1999-00, all segments except track renewals and electrification projects have recorded double digit CAGRs. Thus, railways are a key contributor to the nation's total construction activity. Indian Railways executes over 90% of its projects on its own, leaving limited scope for construction companies.

Indian Railways also receives offers for execution of railway projects in other countries. Such projects are generally transferred by the Indian Railways to IRCON as the Indian Railways does not execute commercial contracts for other entities. Such international business contributes heavily to IRCON'S revenues from international projects.

Apart from works related to the Indian Railways, the railway segment also involves works related to railway sidings, etc. for PSUs, private companies, etc. However, such business tends to be sporadic and highly unpredictable and hence, is not a thrust area for most players in the construction industry.

Mass Transit is an emerging sub-segment within the rail segment in India. IRCON has already secured the MRTS Phase - I tunnel project for Delhi Metro Rail Corporation, being executed as a joint venture partner with four international construction companies. The value of the total project is around Rs. 16500 mn, with IRCON's share being 9.5%. Similar projects are expected in future in cities such as Kolkata, Delhi, Chennai, Mumbai, Hyderabad, Bangalore, Ahmedabad, Pune, etc.

Roads & Highways

India has the second largest road system in the world with an aggregate network length of around 3.3 million km. The pressing infrastructural needs for the country's economic development coupled with the need for increasing traffic bearing capacity in selected sections of the road network have resulted in greater thrust by the government on the road sector.

Over the medium term, the key drivers for construction activity in the roads sector are expected to be the National Highway Development Programme comprising the Golden Quadrilateral Connectivity Programme and the North-South & East-West Corridor Connectivity Programme, totalling 13,252 km.

State Highway Projects

International Bank for Reconstruction and Development (IBRD) is providing specific assistance to various Indian states to improve their highway networks. For example, Andhra Pradesh has been sanctioned funding of US\$350 mn by IBRD for improvement and maintenance of state highways, The total project cost is estimated to be around US\$ 485.5 mn, with the state's contribution being US\$ 135.5 mn. IRCON has executed project for the Government of Andhra Pradesh under this programme.

International Market

According to ENR research, the construction market around the world is estimated at \$3.22 trillion dollars in 1998. Since the industry is closely linked to GDP performance, the current size of the market will be a reflection of the underlying growth trends in individual country economies. The regional split of the industry is as below:

Table 1 - Construction Industry : 1998

Region	Size	
	(US\$ Bn)	%
Asia	1124	34.9%
Europe	995.6	30.9%
North America	723.6	22.4%
Latin Am	238.6	7.4%
Middle east	76.7	2.4%
Africa	59.4	1.8%
Others	5.87	0.2%
Total	3223.77	100.0%

Source: ENR / CRISIL Advisory Services

While in the short term, construction activity tends to be strongly linked to fluctuations in overall economic activity, government-funded construction reduces cyclic sensitivity. The impact of long-term growth on construction activity tends to be greatest in countries in the middle range of development, when large-scale infrastructure investments and secondary urbanization dominate the growth process. Thus, the Asian and African regions are likely to be faster growing regions as compared to other regions.

Internationally, the highway sector is a major recipient of large multilateral funding from the World Bank, Asian Development Bank, African Development Bank, etc.

Apart from India, major investments in the roads sector are being made in countries such as China, Bangladesh, Brazil, Indonesia, Ghana, Malaysia, Zimbabwe, etc.

Policy & Regulatory issues for the industry

In India, 100% foreign investment has been allowed in the roads sector in 1998 and in several other infrastructure sectors such as airports, real estate, etc. in 2001. As a result, international construction companies have begun to enter the sector in the country mainly through joint ventures or consortiums with the Indian players

Market Position of IRCON

Market Share

IRCON accounts for around 0.5% share in the Indian construction market which is highly disorganised. The organised sector accounts for around 8-10%¹ of the total industry, while the remaining market share is accounted for by the government and the unorganised sector.

In the Indian railway sector, the Indian Railways typically executes over 90% of its total projects on its own. Mainly projects to be executed in strategic locations are outsourced to IRCON by the Indian Railways.

In the roads & highways sector, IRCON faces stiff competition from international and domestic players including L&T, Gammon India Ltd., HCC, EIL, etc.

Most Indian construction companies have negligible revenues from international operations (typically less than 1% of the total operating revenues of the company). IRCON, however, has earned around 50% of its income from international projects during the year ending March, 2001. But over 90% of these projects are bagged by IRCON on account of its association with the Indian Railways.

In the international sector, both in highways and in railways, there is a strong presence of Korean, Chinese and Japanese companies.

Financial Performance of IRCON

The tables below illustrate the performance of IRCON in financial terms. The Balance Sheet and Profit and Loss Account of IRCON are given below:

¹Based on data from Prowess, CMIE

Table 2 - Balance Sheet of IRCON

BALANCE SHEET (Rs. Mn) As of March 31	2001	2000	1999
Liabilities			
Share Capital	49.5	49.5	49.5
Reserves & Surplus	4899.9	4407.5	4071.6
Networth	4949.4	4457.0	4121.1
Long Term Debt	133.6	0.0	0.0
Short Term Debt	100.7	0.0	0.0
Total Debt	234.3	0.0	0.0
Current Liabilities	2944.2	3093.9	2248.6
Provisions	2164.1	1489.2	1988.6
Total Liabilities	10292.0	9040.1	8358.3
Assets			
Gross Block	1523.3	1480.9	1368.4
Net Fixed Assets	741.3	640.0	440.8
Investments	1494.3	1494.3	1585.9
Current Assets	8056.4	6905.8	6331.6
Total Assets	10292.0	9040.1	8358.3

Source: CRISIL Advisory Services

Table 3 - Profit & Loss Account of IRCON

PROFIT & LOSS ACCOUNT	2000-01		1999-00		1998-99	
	Rs. Mn.	% of OI	Rs. Mn.	% of OI	Rs. Mn.	% of OI
Income from Operations:						
Gross Sales	7439.5	98.5%	4950.8	98.3%	3630.4	98.6%
Excise Duty	-		-		-	
Net Sales	7439.5	98.5%	4950.8	98.3%	3630.4	98.6%
Other related income	112.2	1.5%	83.1	1.7%	51.4	1.4%
Operating Income	7551.7	100.0%	5033.9	100.0%	3681.8	100.0%
Expenditure:						
Works Expenses	4817.6	63.8%	3447.4	68.5%	2102.8	57.1%
(Accretion)/Decretion to Stocks	(58.1)	-0.8%	(7.1)	-0.1%	51.8	1.4%
Consumable Stores	645.6	8.5%	522.3	10.4%	677.7	18.4%
Employee Costs	399.8	5.3%	373.5	7.4%	437.3	11.9%
Selling Expenses	70.8	0.9%	54.8	1.1%	103.8	2.8%
Power & Fuel Costs	9.3	0.1%	8.8	0.2%	16.8	0.5%
Technical Know How Expenses	255.2	3.4%	105.4	2.1%	47.5	1.3%
Other Expenses	346.2	4.6%	256.2	5.1%	266.1	7.2%
Miscellaneous Expenditure w/off	-		-		-	
Expenditure Capitalised	-		-		-	
Cost of Sales	6486.4	85.9%	4761.4	94.6%	3703.9	100.6%
OPBDIT	1065.3	14.1%	272.5	5.4%	(22.2)	-0.6%
Interest and Finance Charges	73.8	1.0%	76.0	1.5%	67.2	1.8%
OPBDT	991.5	13.1%	196.5	3.9%	(89.5)	-2.4%
Depreciation	108.5	1.4%	98.1	1.9%	93.8	2.5%
OPBT	883.0	11.7%	98.4	2.0%	-183.3	-5.0%
Non-operating Income	491.7	6.5%	339.0	6.7%	442.0	12.0%
Extraordinary Income/(Expenses)	(52.2)	-0.7%	(1.5)	0.0%	6.0	0.2%
Cash Adjustments	(110.6)	-1.5%	(20.0)	-0.4%	11.82	0.3%
APBT	1211.8	16.0%	415.9	8.3%	276.6	7.5%
Tax	345.8	4.6%	122.0	2.8%	37.0	-4.3%
PAT	866.0	11.5%	293.9	5.8%	239.5	6.5%
Non-cash Adjustments	(208.8)	-2.8%	170.1	3.4%	323.6	8.8%
Dividend	163.6	2.2%	126.6	2.5%	123.5	3.4%
Accretion to Reserves	193.6	6.5%	337.3	6.7%	439.6	11.9%
Net Cash Accruals	811.0	10.7%	265.4	5.3%	209.8	5.7%

Source: CRISIL Advisory Services

Table 4 - Turnover Growth at IRCON²*(Rs. Mn.)*

Year ending March 31	2001		2000		1999		CAGR
Turnover	Total	% of Total Turnover	Total	% of Total Turnover	Total	% of Total Turnover	
Domestic Projects							
Railways (including S&T)	690	8.9%	810	16.1%	470	12.4%	21.2%
Roads & Highways	2000	25.8%	2040	40.6%	1260	33.2%	26.0%
Others	1220	15.8%	1190	23.7%	1430	37.6%	-7.6%
Sub-Total	3910	50.5%	4040	80.3%	3160	83.2%	11.2%
International Projects							
Railways (including S&T)	3330	43.0%	930	18.5%	40	1.1%	812.4%
Highways	60	0.8%	40	0.8%	70	1.8%	-7.4%
Others	440	5.7%	20	0.4%	530	13.9%	-8.9%
Sub-Total	3830	49.5%	990	19.7%	640	16.8%	144.6%
Grand Total	7740	100.0%	5030	100.0%	3800	100.0%	42.7%

Source: CRISIL Advisory Services

It may be noted that IRCON's total operating income has grown at a CAGR of 42.7% over the period 1998-99 to 2000-01, mainly on account of an increase in the operating income from international projects at a CAGR of 144.6% during that period. The increase in business from railways (including signalling and telecom) was the major contributor towards the increase in the turnover from international projects. The increased business in the roads and highways sector was the major contributor towards the increase in domestic turnover.

Table 5 - Comparison of Growth in Turnover

Year ending March 31	1999	2000	2001	CAGR
IL	3806.7	5091.8	7737.3	42.6%
HCC	5568.7	4689.3	4367.7	-11.4%
Gammon India Ltd.	3276.8	4516.7	5037.5	24.0%

*Source: CRISIL Advisory Services*²Includes gains & losses from foreign exchange fluctuations

IRCON has recorded a higher growth in turnover as compared to HCC and Gammon primarily on account of the growth in its international business.

Table 6 - Comparison of Revenues from International Projects

Year ending March 31, 2001	% of OI
IRCON	49.6%
HCC	2.5%
Gammon India Ltd.	0.0%

Source: CRISIL Advisory Services

The revenues from international projects as a percentage of total projects is high at around 50% for IRCON as compared to its peers in the Indian industry. However, over 90% of such international revenues is attributable to its association with the Indian Railways.

Segmentation of Turnover

The following table indicates the share of competitively bid projects in the total turnover of IRCON:

Table 7 -Share of competitively bid projects in IRCON's total turnover

	2000-01			1999-00			1998-99		
	Turn Over	% of Total Turn over	Share of Competitive Business	Turn Over	% of Total Turn over	Share of Competitive Business	Turn Over	% of Total Turn over	Share of competitive Business
Railways									
Domestic	690	9%	30%	810	16%	37%	470	12%	34%
International	3330	43%	29%	630	13%	49%	40	1%	100%
Sub-total	4020	52%	29%	1440	29%	42%	510	13%	39%
Highways									
Domestic	2000	26%	62%	2040	41%	68%	1260	33%	46%
International	60	1%	100%	40	1%	100%	70	2%	100%
Sub-total	2060	27%	63%	2080	41%	68%	1330	35%	49%
Others									
Domestic	1220	16%	34%	1190	24%	42%	1430	38%	83%
International	440	6%	9%	320	6%	6%	530	14%	8%
Sub-total	1660	21%	28%	1510	30%	34%	1960	52%	63%
Grand Total	7740	100%	38%	5030	100%	51%	3800	100%	55%

Source: CRISIL Advisory Services

The key observations from the above table are the following:

The share of railway projects in IRCON's total turnover in 2000-01 was high at 52%. A large percentage of railway revenues in 2000-01 was earned from international projects, which contributed around 43% to IRCON's total turnover in 2000-01. The share of competitively bid projects is relatively low in the railway sector at around 29-30% in 2000-01 and around 39-42% in 1998-99 and 1999-00.

The share of highway projects in IRCON's total turnover in 2000-01 was around 27%. A small percentage of highway revenues in 2000-01 was earned from international projects, which contributed around 1% to IRCON's total turnover in 2000-01. The share of competitively bid projects is high in the highway sector at around 63% in 2000-01 and around 68% in 1999-00.

At an overall level, the share of competitively bid business in the total turnover has been at around 38% in 2000-01, 51% in 1999-00 and 55% in 1998-99, showing a decreasing trend.

Overall, the share of competitively bid business against the total international turnover has been rather low at around 28% in 2000-01, 37% in 1999-00 and 23% in 1998-99.

At an overall level, the share of competitively bid business against the total domestic turnover has been at around 48% in 2000-01, 54% in 1999-00 and 61% in 1998-99, again showing a decreasing trend.

Order Book Position

Table 8 - Order Book Position³

(Rs. Mn.)

Year ending March 31 Order Book Position	2002 Total	% of Total	2003 Total	% of Total
Domestic Projects				
Railways (including S&T)	1,718.0	35.7%	4,038.0	39.9%
Roads & Highways	551.9	11.5%	1,416.0	14.0%
Buildings	172.6	3.6%	792.9	7.8%
Others	98.0	2.0%	81.2	0.8%
Sub-Total	2,540.5	52.8%	6,328.1	62.6%
International Projects				
Railways (including S&T)	1,844.6	38.4%	2,349.8	23.2%
Mechanical	-	0.0%	-	0.0%
Others	422.0	8.8%	1,434.5	14.2%
Sub-Total	2,266.6	47.2%	3,784.3	37.4%
Grand Total	4,807.1	100.0%	10,112.4	100.0%

Source: CRISIL Advisory Services

IRCON's current order book position indicates that railways and roads would continue to be significant sectors for IRCON's domestic business in 2002-03, while railways would be a significant contributor to operating revenues from IRCON's international business during 2002-03.

As per IRCON's progress report for March, 2002, the revenues from leasing and maintenance of diesel locomotives to KTMB Malaysian Railways is expected to constitute around 7% of total orders (secured upto March 2002) for 2001-02 and around 3.5% of total orders (secured upto March 2002) for 2002-03.

Operating Margin

Economies of scale due to higher sales revenues coupled with the increase in the share of international projects in the total turnover of the company led to an increase in operating margins from -0.6% of net operating income in 1998-99 to 5.4% in 1999-00 and further to 14.1% of net operating income in 2000-01.

The break-up of margins for the domestic and international business is as follows:

³The order book position is based on IRCON's monthly progress report for March, 2002. For the Year 2002, it excludes projects secured and executed completely in 2001-02 itself. For the year 2002-03, its outstanding project values of all projects continuing beyond 2002-03 have been apportioned equally over the estimated span of the project.

Table 9

Year ending March 31	2001	2000
Domestic Business - Cash Plus Projects	5.3%	4.4%
Domestic Business - Item Rate Projects	-2.2%	-1.0%
Domestic Business - Overall	0.8%	1.0%
International Business	29.3%	21.3%
Overall Operating Margins	14.9%	5.4%

Source: CRISIL Advisory Services

Non-Operating income

The company generates significant free cash with little reinvestment requirements. The free cash is deployed in investments and term deposits, which generate interest revenues. Consequently, non-operating income accounted for 6.7% of the net operating income in 1999-00 and for 6.5% of the net operating income in 2000-01, as shown below:

Table 10 - Comparison of Non-operating income as a % of OI

Year ending March 31	2001
IIL	6.5%
HCC	0.2%
Gammon India Ltd.	0.2%

Source: CRISIL Advisory Services

As can be noted from above, IRCON has a high level of non-operating income when compared with its peer group.

Net Worth

IRCON has an authorised share capital of Rs. 250 mn. and the paid up share capital was Rs. 49.5 mn. as of March 31, 2001. The company has been continuously making profits since 1977-78 and had accumulated reserves and surplus of Rs. 4950 mn as

on March 31, 2001. It was a zero-debt company in 1998-99 and 1999-00 and had a debt of Rs.234.3 million as on March 31, 2001.

Business Plan and SWOT Analysis of IRCON

Projections on Turnover:

The following turnover has been projected by consultants (TCS) for the company in May, 2001:

Table 11

Business Area	Target (Rs. mn.)
Highways	5100
Railways	5500
Signalling & Telecom	700
Electrical	700
Mass Transit	800
Leasing	700
Others (Buildings/ Ports/ Airports)	500
Total Turnover (by 2005-06)	14000
Actual Turnover (in 2000-01)	7737
Expected CAGR (2000-01 to 2005-06)	12.6%

Source: CRISIL Advisory Services

SWOT Analysis of IRCON:

Strengths

- IRCON's experience in executing high value railway projects, especially in foreign countries.
- IRCON's association with the Indian Railways and its ability to draw upon Indian Railways' expertise, manpower and other resources for execution of various projects. From the point of view of disinvestment, if the prospective private

strategic partner had executed large-sized projects and had significant international exposure (especially in the railway sector), the association with Indian Railways would be necessary only for the initial period of two to three years, as the strategic partner would have the capability to independently build on IRCON's business beyond that timeframe.

- Financial strength (profitability track record and balance sheet strength).
- Strong order book position for the years 2001-02 and 2002-03.

Weaknesses

- High degree of dependence on its association with Indian Railways for its international business (which contributed nearly 50% of its total operating income in 2000-01). Only 28% of IRCON's international business was competitively bid in 2000-01.
- The company depends almost entirely on its international business for its operating margins. Its operating margins from its domestic business are significantly lower compared to those of its key competitors such as HCC and Gammon.
- In the case of domestic projects, IRCON tends to execute a large number of low value projects.
- Majority of the projects executed by the company do not involve equity contribution from IRCON. However, the trend in the construction industry is increasingly towards equity participation/ BOT projects, especially in the case of larger projects. The margins tend to be higher in equity participation projects, but the risk is also higher as the construction company also bears (at least partially) the funding and operating risk of the project. Since IRCON has limited experience in executing equity participation projects, its ability to secure such projects is expected to be impaired in the future.
- The company has identified surplus labour/ staff at lower levels as one of its key weaknesses.
- Inability to attract and retain talented staff at middle and higher levels.

Opportunities

- Increased thrust on infrastructure development, especially in the roads and highways and the railways segments.
- New business avenues in India, such as Mass Rail Transit Systems (MRTS)

Threats

- Increased competition on account of entry of foreign players in the Indian construction industry.
- Non-acceptability of IRCON by international clients, in the event that its association with Indian Railways ceases to exist.
- International railways business (including signalling & telecom) constituted around 43.5% of IRCON's operating income in 2000-01. Therefore, unless the signalling and telecom technology, procured from Indian Railways, is continuously upgraded and modernised, there is possibility of this business getting adversely affected in the face of competition.

Value Enhancement

Key Value Drivers

The key value drivers for the company should be the following:

- Ability to market more aggressively and build on its past experience and current order book
- Ability to secure more projects, nationally and internationally, through competitive bidding.
- Ability to bring about increased efficiencies in project execution, resulting in higher works margins for domestic projects.
- Ability to bring in operational efficiencies in terms of working capital management and speeding up of the VRS process.
- Ability to induct and retain best professionals, both managerial and technical, on a global basis, from Indian Railways and outside.

Operational Efficiencies

VRS to employees

The total employee strength, as on 31.3.2001, is 1808. The company has surplus staff at lower level, the ratio of higher and middle level staff (including technical staff) to lower level staff being around 1:1. There is scope for value enhancement by speeding up the VRS scheme.

Sundry Debtors

IRCON'S operations are highly working-capital intensive. Its debtors as days works receipts were high at 118 days in 2000-01. Hence, there is scope for improving the company's working capital position and hence, the company's value through efficient debtor control.

Financial Restructuring

As on March 31, 2002, the company had free cash including investments of total value of Rs. 2236.4 million in its books. It is recommended that a substantial portion of the free cash and marketable securities be paid to the government before disinvestment. A special dividend has to be declared in order to return the full or substantial portion of the free cash of to the shareholders. Since IRCON's profits would be insufficient to pay the above dividend, it has to pay dividends out of its free reserves. Necessary permission from the Government. to declare the special dividend is to be taken.

Recommendations

Based on IRCON's business profile, its past performance and future potential, it is expected to offer an attractive value proposition to players aiming to enter/ expand into the railway and other construction business.

The key issues that need to be addressed before the disinvestment of IRCON are:

- Continuation of the technical workforce of IRCON on deputation from Indian Railways, post-disinvestment, for a few years, till the company becomes an international major on its own.
- Continuation of Indian Railways' association with IRCON for sourcing of the Indian railway expertise as well as for business development post-disinvestment,

for a few years. This would ensure continuity as well as provide comfort to the clients and prospective strategic partners in India and abroad. Suitable arrangements could be made accordingly, for a limited period, between IRCON and the Indian Railways and included in the transaction documents for strategic sale.

- The private sector can bring in greater efficiency, and access the best managerial and technical expertise, with greater vision and flexibility of operations, for IRCON to realise its full potential to become a global major in the international construction market.

The Commission, therefore, recommends the following course of action:

In order to bring in efficiencies by way of greater focus on value drivers, strategic sale of 51% stake and transfer of management control in the company through a competitive bidding process is recommended, after having withdrawn necessary surplus from IRCON.

With a view to ensuring the retention of the employees on deputation from Indian Railways as well as other key employees of IRCON, suitable schemes of incentivization of employees such as Employee Stock Option Plan (ESOP)/Employees Stock Purchase Scheme should be explored.

The government should undertake a phased dilution of equity, having ensured that the government's stake does not fall below 26% at least for 3-5 years. Indian Railways' continued association with the business in terms of a 26% stake in the company could prove to be a value enhancer as well as a suitable incentive to support the business development activities of IRCON in the interim period before complete disinvestment of GOI equity in the company.

* * *

2.2 CENTRAL INLAND WATER TRANSPORT CORPORATION LTD.

Introduction

Central Inland Water Transport Corporation Limited (CIWTC) was established in 1967 by taking over the assets and certain liabilities of the erstwhile River Steam Navigation Company Ltd. CIWTC works under the administrative control of Ministry of Shipping (MoS). At present, CIWTC is the principal Inland Water Transport operator in India.

The total paid-up equity capital of CIWTC as on March 31, 2001 was Rs.1080.30 mn., excluding Rs.8.3 mn as share application money pending allotment. With Govt holding 99.74% of the paid-up capital, State Governments of Assam and West Bengal hold the balance equity. CIWTC's shares are not listed on any of the stock exchanges in India.

Principal activities of CIWTC are:

- Transportation by inland waterways from
Kolkata to Allahabad (National Waterway I);
Kolkata to Bangladesh and Assam (National Waterway II); and
Lighterage operations on river Hoogly
- Construction and repair of small and medium sized vessels.

The main operational Divisions of CIWTC are :

1. **River Services Division (RSD)** : This Division is engaged in riverine operations in Eastern (NW I) and North Eastern (NW II) regions of the country through Bangladesh.
2. **Rajabagan Dockyard Division (RBD)** : This Division is engaged in ship building and ship repairing activities.

Deep Sea Ship Repair Division, which used to undertake all types of repair work of ocean-going vessels, was closed down as per MoU dated January 3rd 2002 entered into between CIWTC and MoS.

Industry Analysis

Inland Water Transport Industry

It is estimated that Transport sector accounts for about 3 to 5 percent of GDP in most countries. The demand for transportation has a positive correlation with the growth of the economy, mobility of population and other related factors. The expected annual growth rate of Indian economy in the near future being estimated around 6% leading to substantial increase in demand on the transportation sector, private sector is expected to play a major role in developing the sector.

Traditionally, transportation industry is classified into road, rail, sea, and air sectors. Percentage shares of railways and roadways in surface transport, in India, are given below:

Table 1 -Percentage shares of railways and roadways in surface transport

(% share in total)

Mode	Freight traffic **		Passenger traffic #	
	1995	1955	1995	1955
Rail	40	89	20	68
Road	60	11	80	32
Inland Waterways	*	*	*	*

*share of Inland Water Transport (IWT) is negligible - less than 1%

** freight traffic share on tonne-km basis

passenger traffic on number of passengers basis

Source: CARE

MoS is responsible for the development of IWT in the country, especially National Waterways. IWT has an advantage in moving very heavy machinery, oversized structural items and bulk commodities, such as food grains, fertiliser, raw materials, POL, iron ore, stone chips and building materials. The advantage lies in its ability to accommodate over dimensional cargo.

IWT network

India with a navigable length of 14,500 kms of rivers, lakes and canals can provide an efficient mode of inland water transportation (especially for those originating and terminating on waterfronts). But only about 40% of the navigable waterway length is used for navigation by mechanised vessels. Unlike the countrywide network of rail and road transport, waterways are restricted to only certain rivers like Ganga in the east, Brahmaputra in the Northeast, the waterways of Goa & canals and backwaters of Kerala, Karnataka, Andhra Pradesh and Maharashtra. . Development of IWT sector has been hampered by inadequate infrastructure with most of the waterways suffering from various navigational hazards like shallow water and narrow width of channel during dry weather, siltation, bank erosion, absence of terminal facilities and navigational aids.

Investment in the sector

Recognising the role that a well-integrated inland water transport system, can play in easing the pressure on other modes of transport, GoI has been steadily increasing the plan allocation to this sector.

Although efforts to develop inland water transport system commenced during the 2nd five year plan (1956-61), the sector started receiving increasing attention only from the 6th five year plan. Upto the end of the 5th five year plan, the total expenditure in this sector was only Rs.340 mn. It was only in the 6th five-year plan that specific national and interstate schemes were taken up. The outlay in the various five-year plans progressively increased from Rs 720 mn in the 6th five year plan to about Rs. 5 billion in 9th five year plan. However, the plan outlay had always been much less than the projected requirements, and the actual expenditure often fell much short of the outlay. As per Report of the Working Group on IWT for Tenth-Five Year plan, the requirement of the sector is worked at to Rs.57 bn.

GoI set up the Inland Waterways Authority of India (IWAI) in 1986, with the objective of focusing attention on development of IWT sector. The expenditure by IWAI on providing infrastructure has been steadily increasing from Rs 229 mn in 1997-98 to an outlay of Rs. 481.5 mn in FY2001. The Budget Estimate for IWAI during 2001-02 was Rs.522.3 mn. The outlay and actual expenditure (central sector) during the last four years are given below:

Table 2 - Outlay and actual expenditure (central sector)*(Rs mn)*

	1997- 98		1998-99		1999-2000		2000-01
	Outlay	Actual	Outlay	Actual	Outlay	Actual	Outlay
IWAI	400	229	450	325	318	276	462
CIWTC	100	100	150	73	60	60	93
Total	500	329	600	398	378	336	555

*Source: CARE***Demand**

As of now, three major waterways have been declared as National Waterways: the Ganga from Haldia to Allahabad (1620 km), the Brahmaputra from Dhubri to Sadiya (891 kms) and the West coast canal from Kottapuram to Kollam (205 kms). The identified cargo projections in various waterways are given below:

Table 3 - Identified cargo projections-IWT

Waterways	Av. Lead (km)	2004-2005		1999-2000		1996-97	
		MMT	bn. Tkm	MMT	Bn.tkm	MMT	bn.tkm
NW II	1535	4.4	6.8	3.2	4.9	2.3	3.5
Sunderbans+Barak	1400	2.0	2.8	1.8	2.5	1.3	1.8
NW I	900	16.0	14.4	13.6	12.2	9.2	8.3
Narmada & Tapti rivers	400	25.0	10.0	21.6	8.6	16.0	6.4
East coast canal+ Brahmani canal	300	33.6	10.1	26.1	7.8	15.9	4.8
Kakinada- Chennai canal	200	2.0	0.4	1.6	0.1	1.3	0.3
Mumbai IWT	200	18.0	3.6	16.0	3.2	14.0	2.8
Godavari & DCS	150	0.9	0.1	0.5	0.1	0.4	0.1
NW III	103	4.2	0.4	3.4	0.4	2.5	0.3
Krishna river	100	0.5	0.0	0.5	0.0	0.4	0.0
Damodar Valley Corp. Canal	80	4.0	0.3	3.2	0.3	2.6	0.2
Goa waterways	75	15.0	1.1	15.0	1.1	15.0	1.1
Total	5443	125.6	50.1	106.5	41.3	80.9	29.5

Source : IWT Policy, January 2001

According to the projections of 9th five year plan, the cargo throughput would increase upto 50 billion tonne km by the year 2005. Also, potential cargo has been identified for three national waterways (NWs):

- **NW I:** The major commodities identified are Bitumen, Cement, Coal, DAP, Dolomite, Fertilizers, Gunny bags, Limestone, POL and Silica sand etc. The estimated volume of traffic is 16 mn tonne per year by the year 2005.
- **NW II:** The commodities include, Bitumen, Clinker, Fertilizers, Jute, Marble Chips, Meghalaya Coal, POL, Salt, Tea etc. The estimated volume of traffic is 4.4 mn tonne per year by the year 2005.
- **NW III:** The commodities include Ammonia, Coir, Fertilizers, POL, Rare Earths etc. The estimated volume of traffic is 4.2 mn tonne per year by the year 2005.

Thus, sizeable cargo potential for IWT exists in all NWs and others namely Barak river, DVC Canal, East Coast Canal integrated with Brahmani river, Kakinada-Mercaunam canal integrated with Godavari and Krishna rivers.

Economics of Inland Waterways

Of all modes of transport, inland water transport is the most fuel efficient, economical and environment-friendly one. It is estimated that one horsepower can move 150 kgs by road, 500 kgs by rail and 4000 kgs by IWT. Similarly, one litre of fuel moves 24 tonne-km by road, 85 by rail and 405 by IWT. If 100 bn tonne km (which would be about 10% of the total inland cargo) is shifted to IWT mode, it will result in saving of 3.22 mn kilolitres of fuel or about Rs 58 bn. And the benefits would be even greater if the share of IWT increases to 20%, as is the case in some other countries, the saving would be of 6.44 mn kilolitres or Rs 116 bn. Besides the commercial and the environmental benefits, Inland Water Transport offers other potential advantages in terms of better water management and flood control, prevention of soil erosion, employment etc. Also in case of waterways, land acquisition and resettlement issues are minimal. Despite all these advantages, CIWTC has not succeeded in developing the sector to its potential.

The railways and the roadways are the two main modes carrying the bulk of freight and passenger traffic. Although considerable emphasis has been laid by successive Governments on development of rail infrastructure, railways have been fighting a losing battle vis-as-vis road transport, as shown in the table earlier. Many countries blessed with river systems give a lot of importance to IWT because of the numerous

advantages it offers in comparison to other modes of cargo transportation. In fact, in some countries it is treated on par with other modes like road and railways.

Ship Building and repairing

Apart from inland water transportation, CIWTC also operates a captive Dockyard, Rajabagan Dockyard (RBD), in South-western part of Kolkata. It undertakes building and repairing of vessels.

The most prominent public sector entities engaged in commercial shipbuilding and repairing in the country are Hindustan Shipyard Ltd., Vizag and Cochin Shipyard Limited.

In India, the market for large vessels is liberalised and ship owners can import large vessels. With further liberalisation, the sector is expected to face competition from international shipyards in small and medium sized vessel market. The major problems with the shipbuilding industry in India include inordinate delay in executing orders and low labour productivity. Shipbuilding activities are also being subsidised by the Government.

With the increased foreign/domestic competition coupled with surplus capacity in shipbuilding, most of the shipyards in the country are expected to concentrate on ship repairing activities.

As regards RBD, the physical and financial performance over the years has been very poor. Various factors like low labour productivity, dependence on outdated technology, working capital crunch, inadequate planning, lack of marketing efforts, high overheads, cost over runs, gradual decline in the number of ships calling at Kolkata port - have all contributed to make RBD a loss-making proposition. It has been a major drag on the performance of CIWTC. As per MoU entered between the Ministry of Shipping and CIWTC, it has been proposed to close down RBD from December 31, 2002.

Policy on Inland Water Transport

Government of India, with a view to encouraging private participation and furthering development of the sector, announced IWT policy in January 2001.

Some salient features of IWT policy are: Joint Venture by IWAI, participation by Government in BOT projects, loan interest subsidy scheme for acquisition of new

vehicles, tax exemption similar to national highways, enhanced rate of depreciation for inland vessels, Customs Duty concession, upto 100% FDI in IWT infrastructure projects, enhanced powers given to IWAI to sanction capital expenditures and issue bonds to mobilise resources for infrastructure development.

IWT policy aims to have greater private participation in order to increase the number of vessels plying in river waters to 2,000 by financial year 2004-05. At present only 400 vessels, including those of CIWTC ply on this mode.

According to IWT policy, areas identified for private sector participation are:

- Ownership and operation of vessels for cargo and passengers;
- Fairway development and maintenance;
- Construction and operation of river terminals or river ports;
- Provision and operation of mechanised cargo-handling systems;
- Putting up and maintenance of navigational aids;
- Provision of pilotage services; and
- Setting up and running of IWT training institutes.

Financial position of CIWTC:

Operating profits

A summary of operating profitability of CIWTC is given below:

Table 4 - Operating profitability (past)

(Rs.mn)

Year ended March 31	2001	CARG (1996-2001)
Income from operations	52.3	-16.2%
Other income	25.0	3.6%
Total income	79.6*	-14.5%
Operating expenses	362	5.0%
PBILDT	-282	—
PAT	-783	—
Dividend (incl. Tax)	0	—
Net cash accrual	-746	—
Retained profit	-783	—

Source: CARE. *including change in stock of Rs.2.3 mn.

The operating income of CIWTC has shown an erratic trend in the past. If interdivisional sales from RBD to RSD are excluded, then the total income for FY2001 would have been only Rs.29 mn. Reported income from operations and interdivisional sales are indicated in the following table:

Table 5

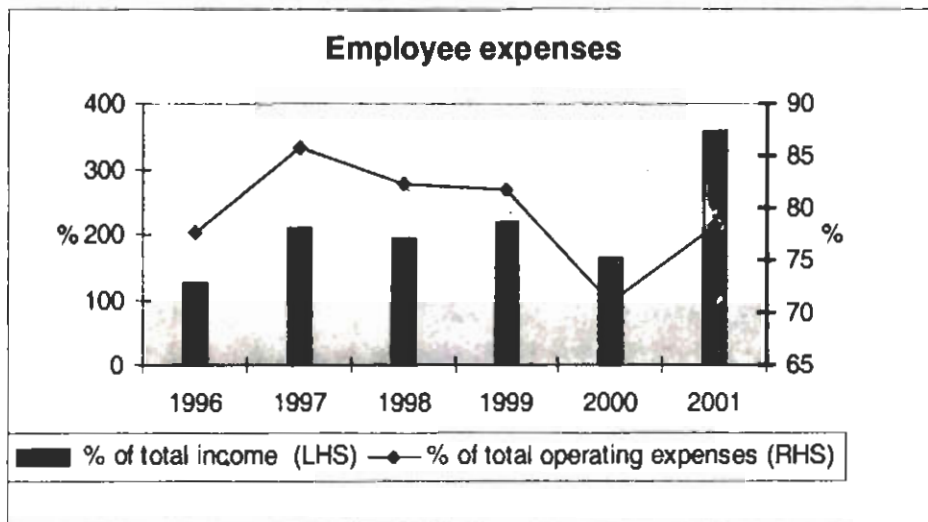
(Rs. mn)

FY	2001	2000	1999	1998	1997	1996
Income from operations	52	109	131	87	112	127
Of which interdivisional sales (%)	44	8	35	1	9	9

Source: CARE.

Of the expenses, employee cost are the main component of total operating expenses. Trend of employee cost as a percentage of total income and as a percentage of total operating cost is indicated below:

Table 6 - Employee expenses



Source: CARE.

Other major head of expenditure for CIWTC is interest charges. These have been increasing over a period as losses have been funded by borrowings. Interest as a % of total income is indicated below:

Table 7 - Interest Expense as % of total income

FY	2001	2000	1999	1998	1997	1996
Interest as a % of total income	515	197	244	181	185	125

Source: CARE.

Sharp increase in interest as a % of total income in FY2001 was more due to drop in income than rise in interest burden.

Cash Flow

Cash flows for the period FY1996 to FY2001 are given below:

Table 8 - Past cash flows

(Rs.mn)

Year to March 31	2001	2000	1999	1998	1997
Net cash flow from operating activities	-206	-137	-172	-181	-151
Cash flow from investing activities	15	65	35	27	20
Cash flow from financing activities					
Fresh equity issue	46	30	37	50	20
Loans from GOI	196	172	179	184	110
Bank overdraft	-20	-40	16	-4	42
Interest accrued & due	393	354	341	243	220
Interest payable during the year	-410	-367	-342	-268	-240
Net cash from financing activities	205	148	230	205	152
Surplus / Deficit for the year	-16	-54	23	-3	-19
Closing cash balance	58	74	128	105	107

Source: CARE

Cash flow from operations has been negative throughout the period under review. Investment in fixed assets over the period has been mainly in vessels, pontoons, lights and buoys. These are funded by plan loans. However, in the past there have been instances of diversion of funds for meeting revenue expenditure and only a part of the funds as indicated below was spent on capital asset formation.

Table 9 - % of plan funds spent on CAPEX*(Rs. mn)*

FY2	2001	2000	1999	1998
Plan funds	93	60	73	100
% of plan funds spent on capex (incl. CWIP)	16	108	48	27

Source: CARE

Losses have been funded by fresh issue of equity, borrowings from GoI and defaulting on interest payments. CIWTC has even defaulted on statutory obligations such as Provident Fund.

Capital employed

The Balance Sheet and Profit & Loss Account of CIWTC are given below:

Table 10 -Balance Sheet of CIWTC*Rs.Mn*

Year to March 31	2001	2000	1999	1998	1997	1996
Fixed assets						
Gross fixed assets	1156.7	1127.5	1070.3	1052.2	1050.7	1019.1
Less: Depreciation	481.1	443.4	406.4	372.2	337.9	304.5
Net fixed assets	675.7	684.1	663.9	680.0	712.8	714.6
Capital work in progress	127.6	141.5	131.9	115.0	89.3	100.9
Capital expenditure for New vessels						
Total fixed assets	803.3	825.6	795.8	794.9	802.1	815.5
Current assets						
Inventories	101.5	100.1	63.5	102.6	51.6	44.3
Sundry debtors	30.1	87.8	136.1	127.8	121.0	174.2
Cash & Bank Balance	57.9	73.5	127.8	104.9	107.5	126.0
Other current assets	0.2	0.0	2.6	2.6	1.9	4.1
Loans and advances	100.6	97.3	145.8	145.7	113.8	74.9
Total current assets	290.3	358.8	495.9	483.6	395.8	423.5
Current liabilities						
Sundry creditors	19.1	30.7	14.4	9.2	13.3	21.8
Advance from customers	52.3	32.7	24.0	30.8	21.7	17.0
Other liabilities	537.6	500.8	496.0	412.7	334.6	282.1
Interest accrued but not Due	119.9	103.4	88.9	75.0	62.9	54.7
Capital suspense as per B/S	3.2	3.2	3.2	3.2	3.2	3.2
Provisions	8.9	10.0	9.2	10.3	11.1	12.9
Total current liabilities	741.0	680.8	635.8	541.2	446.9	391.8

Cont.....

Rs.Mn

Year to March 31	2001	2000	1999	1998	1997	1996
Net working capital	-450.7	-322.0	-160.0	-57.6	-51.1	31.7
Operating capital employed	224.9	362.1	503.9	622.4	661.7	746.3
Total investments	0.1	0.1	0.1	0.1	0.1	0.1
Total capital employed	352.7	503.7	636.0	737.5	751.1	847.3
Term liabilities						
Loans from GOI	2026	1829	1657	1479	1295	1184
Interest accrued & due	2713	2320	1967	1625	1382	1163
Bank overdraft	17	37	77	62	65	23
Term liabilities	4755	4187	3701	3165	2742	2370
Shareholders fund	-4402.7	-3682.8	-3065.0	-2427.9	-1991.2	-1522.6
Equity share capital	1088.6	1042.3	1012.1	975.6	925.6	905.4
Reserve & Surplus						
<i>Capital subsidy</i>	1090.6	1090.6	1090.6	1090.6	1090.6	1090.6
<i>P&L account (Loss)</i>	-6575.1	-5792.5	-5137.7	-4478.7	-3953.6	-3474.6
<i>Misc. exp. not written off</i>	6.8	23.2	30.0	15.7	53.7	43.9
Networth	-4402.7	-3682.8	-3065.0	-2428.2	-1991.1	-1522.5

Source: CARE

Table 11 - Profit and Loss Account Of CIWTC

Rs.(mn)

Year to March 31	2001	2000	1999	1998	1997	1996	CARG
Income from services	52.3	109.2	130.5	86.6	111.9	126.9	-16.2%
Change in stock	2.3	36.8	-20.1	43.3	-3.1	26.8	-38.7%
Other incomes	25.0	40.4	29.7	18.0	21.3	20.9	3.6%
Total income	79.6	186.4	140.1	147.8	130.2	174.7	-14.5%
Expenses							
Employee expenses	283.2	305.6	307.4	286.0	272.0	220.4	5.1%
Operating expenses	40.5	53.9	18.5	10.2	13.8	22.0	13.0%
Admin & other expenses	25.5	43.3	22.6	23.7	12.8	14.0	12.7%
Materials & stores consumed	13.0	27.3	27.5	27.4	18.5	27.4	-13.9%
Total expenses	362.1	430.2	376.1	347.4	317.1	283.8	5.0%
PBILDT	-282.5	-243.8	-236.0	-199.5	-187.0	-109.1	21.0%
Depreciation	37.1	35.5	34.3	34.1	33.6	32.9	2.5%
PBIT	-319.6	-279.3	-270.2	-233.7	-220.5	-142.0	17.6%
Interest	409.7	367.4	342.0	268.3	240.2	217.7	13.5%
Provision for doubtful Debts	41.9	9.8	23.2	9.0	33.1	20.9	14.9%
PBT	-771.3	-656.5	-635.3	-511.0	-493.8	-380.5	15.2%
Provision for taxes	0.0	0.0	0.0	0.0	0.0	0.0	
Prior period adjustments	11.4	-1.7	23.6	14.1	-14.8	25.5	-14.9%
Other adjustments	0.0	0.0	0.0	0.0	0.0	0.0	
PAT	-782.7	-654.8	-659.0	-525.1	-479.0	-406.0	14.0%
Gross cash profit	-745.5	-619.3	-624.7	-491.0	-445.4	-373.2	14.8%
Dividend (incl. Tax)							
Net cash profit	-745.5	-619.3	-624.7	-491.0	-445.4	-373.2	14.8%
Retained profit	-782.7	-654.8	-659.0	-525.1	-479.0	-406.0	14.0%

Source: CARE

Term liabilities indicated in the Balance Sheet include overdue interest payable to GoI. CIWTC being a GoI organisation, default on payment of interest has not been viewed seriously.

Figures given above indicate that CIWTC is in financial distress. With continued losses over the years, networth of the company stands totally wiped out. But for being a service company, the company would have been referred to BIFR long back.

As CIWTC has been making operational losses, key ratios such as return on capital employed and return on equity continue to be negative throughout the period under review.

Loan liabilities

Loan Liabilities of CIWTC over last five years are indicated below:

Table 12 - Loan liabilities

(Rs.mn)

At the end of FY	2001	2000	1999	1998	1997	1996
Loans from GoI	2026	1829	1657	1479	1295	1184
Interest accrued & due	2713	2320	1967	1625	1382	1163
Bank overdraft	17	37	77	62	65	23
Total Term liabilities	4755	4187	3701	3165	2742	2370

Source: CARE.

Interest accrued and due is payable mainly on GoI loans. As interest falling due during the year is not being paid, overdue interest has been mounting.

Due to strained liquidity, CIWTC had defaulted on PF dues. As on March 31, 2001 the overdue amount of PF was Rs.228 mn. To recover these dues, Regional Provident Fund took possession of two vessels and disposed them of.

Contingent liabilities

Capital commitments and contingent liabilities of CIWTC are indicated below:

Table 13 - Contingent liabilities*(Rs.mn)*

As an 31/3	2001	2000
Estimated amount of contract remaining to be executed on capital account (Net of advances)	14.3	16.8
Claims not acknowledged as debts	14.1	10.0
Contested demand of Sales Tax	14.6	14.6
Contested demand of Customs and excise duty	9.5	9.5
Suits pending before various Courts in India	14.8	0
Suits pending before foreign court (Bangladesh)	4.6	4.6
Total	71.9	55.5

Source: CARE

Most of the liabilities mentioned above are of routine nature arising during course of business.

Recommendations

From the preceding analysis, it may be seen that the main factors adversely affecting the performance of two main Divisions of CIWTC are the following:

RSD

- Insufficient /erratic draught;
- Inadequate infrastructure;
- Lack of night navigation facility;
- Inability to mobilise cargo; and
- Sub-optimal vessel-mix.

RBD

- Outdated technology;
- Lack of investment in machinery and equipment;
- Low labour productivity; and
- High labour cost and huge overheads.

It may be noted that infrastructural problems cited above had been in existence even in the past, when the operational performance of CIWTC was better than in the recent past. In fact, these are some of the reasons preventing private players from entering the sector in a big way. The development of competing modes of transport and ineffective marketing efforts by CIWTC have largely contributed to the recent decline in operations. Declining operations have led to redundancies in personnel and the work culture prevailing in the company leaves a lot to be desired. Poor work culture has further contributed to CIWTC's financial crisis. The employee strength, even after reduction through VRS, is 1984, as on 1.5.2002. As indicated earlier, it has been decided to close down RBD from December, 2002.

Inability to resolve the problems cited above has led to the deterioration in operational and financial performance of CIWTC. The networth of the company stood totally wiped out as on March 31, 2001 and accumulated losses as on that date were Rs.6.58 bn. The company is in financial distress and has failed to meet the objectives with which it was set up. Both from commercial and economic points of view, CIWTC's present operations can not be sustainable. Since IWT is a non-strategic sector, there appears to be no justifiable reason for CIWTC to remain in the public sector any longer.

It is estimated that even in Indo-Bangladesh trade, more than 95% of the cargo moves by road/rail. While suspension of CIWTC operations to Bangladesh (NWII) may lead to lapse or modification of the Indo-Bangladesh Protocol on Inland Water Transit and Trade, it is unlikely to have any significant impact as bulk of the cargo between India and Bangladesh is transported by rail/road. Besides, private operators, in place of CIWTC, can be encouraged to transport goods, wherever it is economically feasible.

Based on the analysis of CIWTC's operations and prospects, the following options may be considered:

- (i) Disinvestment of entire GOI equity of CIWTC to a private investor together with financial restructuring; or
- (ii) Sale of assets and winding up of the company.

Advantages and disadvantages of the two options are discussed below:

Disinvestment of entire equity held by GoI

- CIWTC continues to function as an entity and will have the benefit of all licenses and permissions already obtained.
- The new investor will have to be interested in building, repairing and plying of the vessels. This (interest in three main activities) may limit the competition and it may be difficult to find an investor with interest in all three activities.
- In case GoA and GoWB refuse to sell their stake, which is very small, their continued presence as shareholders may not be appreciated by the new owners.
- However, there may be investors who may have synergy with the operations of CIWTC and may be interested to buy complete GoI stake, provided some capital restructuring is approved by the Government at the time of privatisation. Such a course will ensure that CIWTC continues as a going concern.

Winding up of the Company

- The buyer needs to buy only the assets he is interested in. It may be possible to sell vessel building/repairing facilities to investors interested in those activities and vessels to those interested in plying the same.
- The terminal facilities may be handed over to IWAI and warehousing facilities can be taken over by Central Warehousing Corporation or others interested in operating the same.
- It may be difficult to find a single buyer interested in all the floating vessels of CIWTC. Floating vessels include SPC, dumb barges, tugs and oil tankers. However it will be possible to classify the floating vessels into different categories and sell them to different investors. For example, oil tankers may be bought by petroleum companies/oil transporters, barges beyond economic use by ship breaking units, river-worthy vessels by transport operators etc.

- The investor will have exact knowledge of assets being acquired and need not worry about hidden liabilities. As a result it is likely that realisations may be greater under this Option as compared to the previous one.
- Care must be taken to ensure that employees responsible for maintenance of assets continue to do their job diligently prior to accepting VRS. In case VRS programme receives a good response, a skeletal staff may have to be retained by the company to complete the sale of assets.

Based on the factors mentioned above, and in view of the potential of Inland Water Transport that can be harnessed by private sector participants, the Commission recommends that the first option of selling entire equity of GoI to a strategic buyer may be pursued together with necessary capital restructuring. The restructuring package is to be finalised in consultation with prospective buyers. If, however, no buyer shows interest, assets of CIWTC may be sold and the company may be wound up following the prescribed procedure. GoI should continue to pursue appropriate policies to ensure that private operators can find it worthwhile to compete and develop this sector.

* * *

2.3 COCHIN SHIPYARD LIMITED

Introduction

Cochin Shipyard Ltd. (CSL) was established in 1972. It became fully operational in January 1983. Its authorised and paid up share capital were Rs.2500 million and Rs.2271.4 million respectively, as on 31.3.2001. Share application money pending allotment was Rs.32.90 million. It is a company fully owned by Government of India. CSL is a **private limited company** as per the definitions of the Company Law. The company's **Articles of Association forbids the issue of shares and debentures of the company to the public.**

CSL has two dry-docks, one dedicated to shipbuilding and the other to shiprepair, both located at Cochin. Both dry-docks are capable of handling vessels of upto Aframax category (~110,000 Dwt). The main businesses of CSL are shipbuilding and shiprepair with a small contribution to revenue coming from training and laboratory services. Past clients of CSL have been mainly central and state PSEs and organisations like SCI, Kandla Port Trust, New Mangalore Port Trust, Chennai Port Trust, Indian Navy, ONGC, DCI etc.

CSL specialises in building crude and product tankers. It is currently building a 93,500 Dwt tanker for SCI at a contract value of around USD 34 million. However, in the absence of a stable order book for tankers, CSL has also been building smaller passenger vessels, tugs and dredgers for various clients. Its current order book also includes three small crafts.

Table 1 -CSL's business profile

Year ending March 31		2001	%	2000	%	1999	%
Shipbuilding	Rs. Mn	881.6	30.4%	712.8	33.1%	1,081.4	42.9%
Shiprepair	Rs. Mn	1,984.0	68.5%	1,421.1	66.1%	1,441.6	57.1%
Other op. Income	Rs. Mn	30.8	1.1%	16.6	0.8%	-	0.0%
Total	Rs.Mn	2,896.4	100.0%	2,150.5	100.0%	2,523.0	100.0%

Source: CRISIL Advisory Services

Industry Analysis

The global shipbuilding industry can be categorised into two distinct segments based on the product profile of their yards:

Mass-built vessels - tankers (crude and product), bulk carriers, container carriers and reefer vessels. This segment is almost 85-90% of the world shipbuilding market.

Custom-built vessels - passenger vessels, offshore platforms, small container carriers etc

Shipbuilding is an inherently cyclical industry with industry cycles in line with the nature of the international commercial shipping market. However, because of the large cycle-times involved in shipbuilding, the industries can at times be exposed to different cycles.

South Korea, Japan and China had the largest share of the world's shipbuilding industry turnover in 2001. Shipyards in South Korea, China and Japan have over the years leveraged their superior productivity and low labour and material costs to progressively get a hold on the world market. The combined market shares of these three countries increased from 62% in 1993 to 79% in 2001, the biggest losers being shipyards in European nations. The primary reasons for the declining share of non-Korea and non-China based industries in world turnover are the cost-competitiveness, the easy access to locally sourced raw material and components and the high labour productivity of Korea and China. Both South Korea and Japan initially enjoyed considerable advantage in shipbuilding, primarily because of their low cost steel industry. This advantage got further reinforced by the emergence of a highly efficient ancillary industry that benefited from economies of scale and a growing shipbuilding industry. Low cost of finance helped them to stimulate exports on competitive terms.

The average age of the world fleet is estimated to be around 19 years, with Oil tankers having an average age of 21 years. The high age of the world fleet in conjunction with stricter norms on scrapping of single hull tankers, implemented by the IMO post the 'Erica'⁴ sinking, is expected to result in significant scrapping activity in the coming years. This in turn is expected to result in demand for tanker new-building.

⁴'Erica' was an oil tanker which sank near the British coast in January, 2000.

Domestic Demand Supply

The domestic shipbuilding industry is small in size as compared to the global industry and consists of four large and twenty-four small shipbuilding yards. The domestic PSE industry caters largely to the requirements of the Central and State Government organisations like SCI, DCI, various port trusts and the Indian Navy. Some of these PSUs are also being considered for privatisation. All the domestic PSU yards operate on very low margins, primarily on account of the higher labour force and lower productivity levels at these yards.

The private sector yards operate primarily in the smaller vessel segments. However, productivity levels at these yards are much higher than the prevailing levels at the PSU yards. Consequently, they have higher margins as compared to the PSU yards.

The fleet size of Indian flag carrying ships as of June 2001 was around 10.4 million Dwt, with the majority of vessels being dry bulk carriers, or crude and product tankers. The average age of the Indian fleet is around 15-16 years, which compares favourably with the world average of around 19 years.

Nearly 30% of the Indian fleet is about 20 yrs old and another 30% is between 16-19 yrs old. Hence there is expected to be replacement demand for the existing fleet which would be met either by new vessels or purchase of second hand vessels. It is estimated that during 10th Plan, there would be need for acquisition of 156 vessels of various types.

Taking also into consideration the demand for passenger vessels, sufficient opportunities exist for domestic shipyards in shipbuilding. It may be noted, however, that most of the Indian fleet has been built abroad with Indian yards accounting for only a small fraction of the domestic fleet.

New-building demand is expected to remain subdued over the period 2002-2005 primarily on account of the heavy new-building activity over the period 1999-2000 and the high prevailing order book positions. However, with significant volumes of scrapping due in the next decade, demand is expected to pick up in the post 2005 period. Realisation on new-building is expected to move in line with trends in new-building activity and remain depressed over the period 2002-05 and then increase over the later half of the decade.

Key Success Factors

Cost competitiveness - Given the chronic overcapacity in the industry, new-building realisations are expected to continue to remain at their low levels. Thus, cost competitiveness would continue to remain a critical success factor for the industry. Thus, it is essential for shipyards to be able to match up to the labour productivity rates in Korea and Japan. In addition, access to cheap labour and key raw materials would also serve in increasing the cost-competitiveness of shipyards

Table 2 -Labour Productivity in India

Labour Output (manhours / Dwt)	
Korea average	4.33
Japan average	6.02
Cochin Shipyard	20 - 25
Hindustan Shipyard	> 200

Source: CRISIL Advisory Services

Marketing Network - The levels of productivity at Korean yards can be matched by yards elsewhere only if they have the backing of a stable order book. In addition, a stable order-book would also help in shipyards scheduling and bulk ordering of raw materials. Thus, having a marketing network that is able to build up an order pipeline is critical to the success of any shipyard.

Ship repairs

Ship repair industry in India consists of eighteen dry docks divided equally between the public and private sector. In addition to these, all major ports have wet berths where repairs are also conducted. The Indian ship repair industry had a turnover of Rs. 14600 mn during the 9th five-year Plan, which is estimated to grow to Rs. 19000 mn in the 10th plan period. The main players in this industry are CSL, HSL, MDL and private players such as Western India Shipyards Ltd, ABG shipyard Ltd.. These shipyards undertake repairs for SCI, Indian Navy vessels and other merchant vessels of Indian registration. Some of the private shipyards such as ABG & WISL have been able to obtain orders for repairs of vessels of foreign flags.

Private Indian shipping companies mainly conduct their repairs at foreign ports such as Colombo and Dubai. According to an estimate, almost 50 % of the repair turnover at Colombo port is reported to be from Indian vessels.

Ship repair business in India is impacted by the fact that India does not fall on the major trade routes. Ship repair is usually conducted at the time of berthing and loading of vessels at a port, as ship owners prefer to minimise time spent in repair. Hence the largest ship repair centres are ports such as Dubai, Singapore and Colombo which lie on the major trade routes.

Much of the repair work is statutory in nature. All vessels have to undergo repairs at predetermined duration in order to obtain certificates of seaworthiness. In addition, a clearance certificate has to be obtained, while departing from each port confirming the seaworthiness of the vessel.

Ship repairs can be conducted either at dry docks or at wet basins. Dry docks are premium repair facilities that are suitable for carrying out repairs for underwater portions of a ship. Large portion of ship repair jobs is outsourced as quick turnaround is very important in ship repair activities. However repair like shipbuilding is highly labour intensive in nature.

The global ship repair market has an estimated turnover of approximately 8.5 billion USD in 2000. The global ship repair market is witnessing a situation of over-capacity with large fresh capacities being set up in low cost nations such as China, Vietnam and the Baltic region. These are impacting the business in the Western Europe market, which is increasingly specialising in niche higher value markets.

The domestic ship repair market is very small as compared to global ship repair markets both in terms of infrastructure and scale of operations. A comparison of the operations of major global dry docks with Indian repair facilities is given below:

Table 3 - Comparison of ship repair docks

	Dubai Dry docks	Colombo Dockyard	CSL	HSL
Number of ships repaired in 2000 (1999)	NA(227)	195(216)	40(37)	27(19)
Number of docks	3 dry docks and 1 floating dock – focussed on repairs	4 dry docks – mix of ship building & repairs	2 dry dock – one for ship building and one of repairs	1 dry dock for repairs & 1 building dock
General type of ships repaired	VLCC, ULCC, LNG carriers and other large vessels	Tankers, containers, tugs etc	SCI, Indian navy, DCI	SCI Indian Navy, DCI

Source: CRISIL Advisory Services

It is estimated that global ship repair market would grow by 2.1% till 2005 while maintaining a long-term growth of around 2% till 2015.⁵ Demand will be driven mainly by regulatory requirements that are growing increasingly stringent.

In India, it has been estimated that the domestic market would grow from Rs 14600 mn in 9th plan to Rs. 19000 mn in 10th plan.

Policy & Regulatory issues for the industry

Taxation related issues

The GoI has effected changes to Section 33AC and Section 115JB in the Budget for 2002-03. This is expected to reduce the tax liability of shipping companies that are planning to earmark profits in a reserve for future capacity expansion, which in turn could improve the order-book position for the domestic shipbuilding industry.

Implementation of the proposed tonnage tax system would also have a positive impact on the profitability of the domestic shipping industry.

Subsidy related issues

Under the current shipbuilding subsidy scheme, the price of an ocean going vessel built by an Indian public sector shipyard is allowed to match the lowest quote for an ocean going vessel in an open Global tender. The shipyard is eligible for an additional 30% realisation above the lowest quote, with the differential being paid by the GoI as shipbuilding subsidy. The price for the deal is fixed in either US dollar or Japanese yen terms, and the net realization to the shipyard is calculated after taking into account the prevailing exchange rates.

In addition, the GoI also has an interest differential subsidy scheme according to which any Indian owner placing an order on public sector shipyards for ship acquisition and raising funds for the purpose from Indian financial institutions would be eligible to receive an interest differential subsidy wherever the interest rate was greater than 9%. The interest differential subsidy was capped at a maximum of 5% and would be available for up to 80% of the ship acquisition cost.

The subsidy schemes were originally notified in August 1997 and were valid over the period 1997-2002. The Inland Vessel Subsidy scheme is aimed at reducing the

⁵Ocean shipping Consultants Ltd.

capital burden to the prospective Inland Waterways Transport (IWT) carrier, which would enhance their profitability and make the IWT tariff competitive. The scheme has come into effect from 1.4.2002 and will remain in force for a period of 5 years. Besides, Inland Vessel Subsidy Scheme envisages an amount equal to 30% of the ex-factory price of the inland vessel and available to an entrepreneur if the vessel is procured from a shipyard in India.

In the Indian context where the order book position in respect of shipbuilding is generally weak, ship repair is a better economic proposition.

Capacity Utilisation

CSL has an installed shipbuilding capacity of 150,000⁶ DWT and shiprepair capacity of 100,000 GRT. Its shipbuilding dock is of size 255 * 43 * 9 meters whereas the shiprepair dock is of size 270 * 45 * 12 meters. The yard also has installed cranes of maximum 150 tonnes listing capacity. Details on past capacity utilisation are given below:

Table 4 - Capacity utilisation

		2000-01	1999-00	1998-99
Shipbldng Cap. (as per Annual Report)	(in Dwt)	150000	150000	150000
Shipbuilding Production	(in Dwt)	54384	47840	60673
Cap. Util.(as per capacity stated in the Annual Report)	%	36.3%	31.9%	40.4%
Cap.Util.(based on capacity of 85,000 Dwt assessed by JICA)	%	64.0%	56.3%	71.4%
Productivity	Mhrs / Dwt	22.58	26.3	17.92
Shiprepair Capacity.	(in GRT)	100000	100000	100000
Ships repaired	(in nos)	22	40	37

Source: CRISIL Advisory Services

⁶Although the shipbuilding capacity, as stated in the company's annual report for 200-01, is 150,000 Dwt per annum, as per a recent study carried out by JICA, the capacity of the shipbuilding yard has been assessed as 85,000 Dwt per annum.

The **low shipbuilding capacity utilisation is primarily on account of the slack order book position.** While productivity levels at CSL compare favourably with other domestic shipyards it compares extremely poorly with global standards. CSL appointed M/s Appledore International for working out productivity improvement options and has recently started implementing the recommendations of the consultants, which could result in some improvements in future.

The average shiprepair-docking time at CSL is around 9-10 days per ship, which is marginally higher than the average time taken by yards in Dubai and Colombo (8-9 days) for the same work. Lack of easy access to spare parts, is the biggest constraint for shorter shiprepair times. The number of ships repaired registered a decline in 2001 primarily on account of the occupation of the dry-dock in repairs of ONGC rigs.

Market Position

CSL has the **largest market share (10%)** amongst Indian shipbuilders in Indian flag tonnage. But, owing to lower productivity levels and the higher delivery time taken by CSL vis-à-vis yards in Korea, it is having a **negligible global market share. Its market share in the domestic market is also under the threat of impending disinvestment of SCI and DCI and the resulting possible loss of orders from these companies.**

To counter this threat, the company has recently made a foray into the international markets and has appointed marketing agents in major markets like London, the Middle East and Singapore. CSL recently bagged an order for an Ocean going vessel for National Petroleum Construction Company, Abu Dhabi at a value of USD 8.2 million. However, its ability to build a sustained order-book position in shipbuilding would largely depend on drastic improvements in operating efficiency and building a large marketing network, both of which could be limited under Government ownership. The key adverse effects of Government ownership that restrict the performance of CSL are:

1. Inability to appoint agents for promoting CSL in key shipping markets. This results in severe restrictions on the market area being targeted by CSL.
2. Inadequate focus on the marketing setup also means that the company does not have access to a management information system that would help it in mapping out potential clients and their requirements on an ongoing basis.
3. Administrative procedures required under the PSU set-up lead to slow down of the decision making process and restrict the company's ability to make quick decisions.

Financial Performance of CSL

The Balance Sheet and Profit & Loss Account of CSL are given below:

Table 5 - Balance Sheet of CSL

BALANCE SHEET (as of March 31)	2001 Rs. Mn	2000 Rs. Mn	1999 Rs. Mn
Liabilities			
Share Capital	1,112.8	1,062.8	1,037.8
Reserves & Surplus	(34.0)	(419.0)	(862.9)
Networth	1,078.8	643.8	174.9
Long Term Debt	2,639.3	2,681.1	2,699.3
Short Term Debt	0.3	0.9	1.2
Total Debt	2,639.7	2,682.0	2,700.5
Current Liabilities & Provisions	1,802.2	1,496.2	3,418.9
Current Liabilities	1,510.8	1,148.4	2,700.6
Provisions	291.4	347.7	718.3
Total Liabilities	5,520.7	4,822.0	6,294.4
Assets			
Gross Block	1,840.9	1,697.1	1,680.7
Net Fixed Assets	814.1	729.4	693.2
Investments	0.2	0.2	0.2
Current Assets	4,706.5	4,092.5	5,601.0
Total Assets	5,520.7	4,822.0	6,294.4

Source: CRISIL Advisory Services

Table 6 - Profit & Loss Account of CSL

PROFIT & LOSS ACCOUNT	2000-01		1999-00		1998-99	
	Rs. Mn	% of OI	Rs. Mn	% of OI	Rs. Mn	% of OI
Income from Operations:						
Gross Sales	2,871.8	99.2%	2,133.8	99.2%	2,470.3	99.1%
Excise Duty	5.3	0.2%	1.3	0.1%	-	
Net Sales	2,866.5	99.0%	2,132.6	99.2%	2,470.3	99.1%
Other related income	29.9	1.0%	17.9	0.8%	22.0	0.9%
Operating Income	2,896.4	100.0%	2,150.4	100.0%	2,492.4	100.0%
Expenditure:						
(Accretion) / Decretion to Stock	-					
Material Costs	1,395.3	48.2%	495.4	23.0%	1,056.6	42.4%
Power & Fuel Costs	58.5	2.0%	48.0	2.2%	47.6	1.9%
Employee Costs	614.9	21.2%	490.9	22.8%	518.8	20.8%
Other Manufacturing Expenses	530.6	18.3%	594.7	27.7%	519.1	20.8%
Selling Expenses	27.3	0.9%	3.0	0.1%	1.3	0.1%
Other Expenses	77.3	2.7%	262.6	12.2%	103.1	4.1%
Miscellaneous Expenditure written off	21.6	0.7%	14.7	0.7%	39.8	1.6%
Less: Expenditure Capitalised	6.1	0.2%	-		30.9	1.2%
Cost of Sales	2,719.3	93.9%	1,909.3	88.8%	2,255.3	90.5%
OPBDIT	177.1	6.1%	241.1	11.2%	237.1	9.5%
Interest and Finance Charges	23.4	0.8%	26.6	1.2%	24.7	1.0%
OPBDT	153.7	5.3%	214.6	10.0%	212.3	8.5%
Depreciation	42.7	1.5%	57.8	2.7%	45.8	1.8%
OPBT	111.0	3.8%	156.8	7.3%	166.5	6.7%
Non-operating Income	310.5	10.7%	280.8	13.1%	204.9	8.2%
Extraordinary Income/(Expenses)	(4.4)	-0.2%	(0.4)	0.0%	(7.2)	-0.3%
Cash Adjustments	96.2	3.3%	45.3	2.1%	32.4	1.3%
APBT	513.3	17.7%	482.5	22.4%	396.6	15.9%
Tax	123.7	4.3%	37.3	1.7%	89.0	3.6%
PAT	389.6	13.5%	445.2	20.7%	307.6	12.3%
Non-cash Adjustments	(4.7)		(1.3)		-	
Equity Dividend	-		-		-	
Preferred Dividend						
Accretion to Reserves	384.9		443.9		307.6	
Net Cash Accruals	427.7		501.7		353.4	

Source: CRISIL Advisory Services

Employee Costs

Table 7 - Employee Costs

	No. of Employees	Employee Costs (Rs. mn)	% of Op. Inc.
2000-01	2366	614.8	21.2
1999-00	2406	490.9	22.8
1998-99	2435	518.8	20.8

Source: CRISIL Advisory Services

CSL had 2,226 employees on its rolls as of 31st March 2002, and employee costs account for around 21% of operating income in 2000-01, as compared to 11-13% for Korean shipyards. Further reduction in employee costs (as a % of operating revenues) could be achieved by enhancing productivity.

More than half the workforce at CSL is over 50 years in age and a significant part of the workforce is expected to retire in the next 4-5 years, which would result in lower employee costs. However, CSL would have to recruit in significant numbers in the coming years to maintain its skill base and to provide for the labour hour requirements for enhanced capacity utilisation.

Operating Margin

Lower shipbuilding turnover was offset by lower material costs resulting in an increase in CSL's operating margins from 9.5% in 1998-99 to 11.2% in 1999-00. The subsequent increase in materials costs offset the higher shipbuilding turnover resulting in a decline in the company's operating margins to 6.1% in 2000-01. Higher operating margins offset the decline in turnover, resulting in an increase in the company's operating profits from Rs. 237.1 million in 1998-99 to Rs. 241.1 million in 1999-00. Subsequently, the decline in operating margins offset the higher turnover, resulting in a decline in operating profits to Rs. 177.1 million in 2000-01. Overall, the company has positive operating margins of around 10% after accounting for the 30% subsidy received on shipbuilding income.

Business Plan and SWOT of CSL

The company has targeted increasing its shipbuilding volumes from the current levels to 85,000 Dwt per annum by 2006-07. The construction schedule for achieving this target is as follows:

Table 8 - Planned Turnover Growth at CSL

	2003	2004	2005	2006	2007	Total
Volumes (in Dwt)						
Ship 010	8,035	-	-	-	-	8,035
BY 42	12,332	-	-	-	-	12,332
BY 44	5,579	1,000	-	-	-	6,579
Aframax	40,054	46,000	20,000	-	-	106,054
ADS	7,000	28,000	54,000	54,000	54,000	197,000
BC	-	-	6,000	28,000	28,000	62,000
Tug	-	-	-	-	3,000	3,000
Total	73,000	75,000	80,000	82,000	85,000	395,000
Turnover (in Rs. mn)						
Shipbuilding Income	1,518	1,845	2,938	4,623	8,274	-
Shipbuilding Subsidy	455	563	281	487	982	-
Small Crafts	558	-	-	-	-	-
Shiprepair Turnover	1,197	1,810	2,080	2,580	2,920	-
Others	86	428	548	(52)	418	-
Gross Turnover	3,815	4,645	5,848	7,638	12,595	-

Source: CRISIL Advisory Services

Thus, the company has projected an increase in its turnover from the current levels to around Rs. 12,595 mn by 2007, which corresponds to an average annual growth rate of around 28% as compared to a historic growth rate in turnover of around 17.2% over the period 1996-2001 and around 6.8% over the period 1998-2001.

SWOT Analysis

Strengths

- Two modern and world-class dry docks capable of building and repairing vessels of upto Aframax category.
- Demonstrated ability in ship-repair.

Weaknesses

- Inability of the business development team to build up an order book, matching the yard's shipbuilding capability.
- No systematic tracking of the market to ensure that management is aware of client requirements on an ongoing basis.
- Lack of marketing reach primarily on account of its inability to maintain a network of brokers in crucial shipping markets.
- Complete dependence on public sector organisations like SCI and DCI for giving it shipbuilding orders.
- Poor productivity levels as compared to overseas shipbuilding yards.
- Significantly aged workforce, with an overall average age of 49.3 years, which could hamper productivity improvement targets and also necessitate large-scale fresh hiring.

Opportunities

- Large market for shiprepair given the location of Cochin along strategic shipping trade routes.

Threats

- Policy changes by the GoI in terms of scrapping of the existing shipbuilding subsidy scheme could result in significant erosion in the company's margins.
- Privatisation of SCI and DCI could result in depleted order flow for CSL.

CSL faces a significant upside potential from its shiprepair business, which has historically been the margin-driver for the company. However, the company also faces significant exposures on its shipbuilding business in which it has a large dependence on contracts from PSUs in India. Given the cyclical nature of the shipbuilding industry, the poor productivity levels and the strategic weaknesses in India's shipbuilding industry, shipbuilding would continue to be a low margin and low returns business for CSL, unless the supply chain gaps and operating inefficiencies of CSL are addressed by a strategic partner. Any potential partner should have strengths in respect of:

1. Generating or transferring the order book, either in whole or in part by subcontracting
2. Addressing the inherent marketing weaknesses of CSL
3. Bringing in the technology, skill and capital required for Productivity improvements

The future strategic thrust of the company should be to enhance its competencies in the ship-repair business and focus its business operations to match the needs of the shiprepair market.

Financial Restructuring

CSL was a loss making entity till 1993-94 and had accumulated losses of around Rs. 1,909.5 mn on its balance sheet as of March 31, 1994. A capital restructuring plan for CSL was approved by the GoI in 1994, under which interest on loans amounting to Rs. 1,369 mn unpaid as on March 31, 1994 was converted into interest-free loans to be repaid in 10 equal instalments with effect from April 2000. In addition, outstanding loans were converted into 7% non-cumulative preference shares of Rs. 1,191.4 mn redeemable before March 31, 2003.

Subsequent to the capital restructuring, CSL has been consistently reporting profits. Its accumulated losses had reduced to Rs. 34 mn as of March 31, 2001. The company is expected to completely wipe out its accumulated losses in 2002. Its networth has also turned positive from the year 1998-99. The company currently has around Rs. 109 mn of interest-free loans on its books, which is expected to be repaid completely by 2010.

Given the business outlook for CSL, it is expected to remain a profitable company in future.

Work Force Restructuring

CSL has a leaner workforce that has higher productivity levels as compared to the other public sector yards in India. However, given its higher employee costs vis-à-vis comparable shipbuilding yards worldwide, there exists a scope for value enhancement by implementing a VRS scheme for the surplus manpower identified.

Recommendations

CSL has a substantial amount of cash reserves which earns interest income for the company. At the same time, it also has a substantial amount of GoI interest free debt and preference equity on its books. CSL could use its surplus cash for repaying its GoI debt and also for redeeming the preference shares. This would have a marginally negative impact on its valuation.

Loss of protection by way of Government subsidies could result in significant value erosion for CSL. It could still be attractive to investors provided they are able to make and sustain improvements in operating parameters through greater marketing reach, increased order-book and higher production efficiencies. Such investors could potentially seek to merge the dual benefits of their production efficiencies with the lower labour cost structures prevalent in India and outsource / subcontract a part of their shipbuilding business to CSL.

On a standalone basis, the shiprepair business generates positive value and should prima-facie interest potential investors who are seeking entry/expansion of the shiprepair business. Such investors would need to bring in working capital efficiencies through improved supply chain management resulting in lower inventory and improved collection efficiencies and reductions in employee costs through productivity enhancement measures and VRS.

There are identifiable surplus assets like contiguous and non-contiguous land available with CSL. Such surplus assets would have to be identified and disposed of or suitable arrangements made to capture their value prior to disinvestment. Issues relating to the transfer of title deed of some of the surplus assets, which are not in the name of CSL but are available with CSL, would also have to be dealt with.

As indicated earlier, CSL is a private limited company and its articles of association specifically limit the number of shareholders to a maximum of 50 and forbid the issue of shares to the common public. Given this, approval of its shareholders would be required prior to disinvestment.

Before privatisation, the issue relating to CSL's association/commitment to Navy/ Ministry of Defence about Aircraft Carrier needs to be sorted out. There should be proper screening of the potential bidders, from the national security point of view. If need be, the facilities created for Naval purposes can be separated and handed over to Defence authorities before privatisation is completed. The argument to postpone privatisation of CSL only because it has taken up long/medium term project from the Ministry of Defence is unconvincing. However, if the Government of India wishes to build up indigenous capability in this strategic area, there are many other ways to achieve that without affecting the course of privatisation of CSL which primarily caters to commercial shipbuilding and ship repairing activities.

As control over a shipbuilding and ship repairing company does not provide any strategic advantage to the Government of India, the Commission recommends that at least 51% control in CSL should be sold to a strategic partner who can bring in the required efficiencies as well as capital, to the extent needed. Given the upward potential of CSL, it would be desirable for GoI to retain some share for some more time.

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2.4 HINDUSTAN SHIPYARD LIMITED

Introduction

Hindustan Shipyard Limited (HSL), the first shipbuilding yard in India, was set up in 1941 by the Walchand Group as Scindia Shipyard. In 1961, GoI acquired the entire stake of the Scindia group. It is under the administrative control of the Ministry of Shipping.

The company has facilities for building up to 50,000 DWT vessels and repairing up to 70,000 DWT vessels. The main businesses of HSL are shipbuilding, shiprepair and retrofitting. Its major clients in the past have mainly been Shipping Corporation of India, Port trusts, Indian Navy, ONGC, Dredging Corporation of India, Andaman & Nicobar administration, Union territory of Lakshadweep, etc.

HSL has currently undertaken medium term repairs of INS VAGLI an F class submarine at its building block for the Indian Navy. The business profile of HSL is given below:

Table 1 - HSL's business profile

Year ending March 31		2001	%	2000	%	1999	%
Shipbuilding	Rs.Mn	667.1	40%	1022.6	49%	963.2	57%
Shiprepair	Rs.Mn	677.4	41%	740.8	36%	693.7	41%
Retrofitting	Rs.Mn	321.5	19%	306.7	15%	39.8	2%
Total	Rs.Mn	1666.0	100%	2070.1	100%	1696.7	100%

Source: CRISIL Advisory Services

Wholly owned by the GoI, the company has an authorised share capital of Rs. 1500 mn, divided into 1.5 mn equity shares of Rs. 1,000 each. The paid up capital was Rs.1018.1 mn as on 31.3.2001. Rs. 50 mn have been shown against share application money pending allotment.

Industry Analysis

The global shipbuilding industry can be categorised into two distinct segments based on the product profile of their yards:

Mass-built vessels - tankers (crude and product), bulk carriers, container carriers and reefer vessels. This segment is almost 85-90% of the world shipbuilding market.

Custom-built vessels - passenger vessels, offshore platforms, small container carriers etc.

Shipbuilding is an inherently cyclical industry with industry cycles in line with the nature of the international commercial shipping market. However, because of the large cycle-times involved in shipbuilding, the industries can at times be exposed to different cycles.

South Korea, Japan and China had the largest share of the world's shipbuilding industry turnover in 2001. Shipyards in South Korea, China and Japan have over the years leveraged their superior productivity and low labour and material costs to progressively get a hold on the world market. The combined market shares of these three countries increased from 62% in 1993 to 79% in 2001, the biggest losers being shipyards in European nations. The primary reasons for the declining share of non-Korea and non-China based industries in world turnover are the cost-competitiveness, the easy access to locally sourced raw material and components and the high labour productivity of Korea and China. Both South Korea and Japan initially enjoyed considerable advantage in shipbuilding, primarily because of their low cost steel industry. This advantage got further reinforced by the emergence of a highly efficient ancillary industry that benefited from economies of scale and a growing shipbuilding industry. Low cost of finance helped them to stimulate imports on competitive terms.

The average age of the world fleet is estimated to be around 19 years, with Oil tankers having an average age of 21 years. The high age of the world fleet in conjunction with stricter norms on scrapping of single hull tankers, implemented by the IMO post the 'Erica'⁷ sinking, is expected to result in significant scrapping activity in the coming years. This in turn is expected to result in demand for tanker new-building.

Domestic Demand Supply

The domestic shipbuilding industry is small in size as compared to the global industry and consists of four large and twenty-four small shipbuilding yards. The domestic PSE industry caters largely to the requirements of the Central and State Government

⁷'Erica' was an oil tanker which sank near the British Coast in January, 2000.

organisations like SCI, DCI, various port trusts and the Indian Navy. Some of these PSUs are also being considered for privatisation. All the domestic PSU yards operate on very low margins, primarily on account of the higher labour force and lower productivity levels at these yards.

The private sector yards operate primarily in the smaller vessel segments. However, productivity levels at these yards are much higher than the prevailing levels at the PSU yards. Consequently, they have higher margins as compared to the PSU yards. HSL's productivity levels are extremely poor even in comparison with other PSU yards.

The fleet size of Indian flag carrying ships as of June 2001 was around 10.4 million Dwt, with the majority of vessels being dry bulk carriers, or crude and product tankers. The average age of the Indian fleet is around 15-16 years, which compares favourably with the world average of around 19 years.

Nearly 30% of the Indian fleet is about 20 yrs old and another 30% is between 16-19 yrs old. Hence there is expected to be replacement demand for the existing fleet which would be met either by new vessels or purchase of second hand vessels. It is estimated that during the 10th Plan, there would be need for acquisition of 156 vessels of various types.

Taking also into consideration the demand for passenger vessels, sufficient opportunities exist for domestic shipyards in shipbuilding. It may be noted, however, that most of the Indian fleet has been built abroad with Indian yards accounting for only a small fraction of the domestic fleet.

New-building demand is expected to remain subdued over the period 2002-2005 primarily on account of the heavy new-building activity over the period 1999-2000 and the high prevailing order book positions. However, with significant volumes of scrapping due in the next decade, demand is expected to pick up in the post 2005 period. Realisations on new-building is expected to move in line with trends in new-building activity and remain suppressed over the period 2002-05 and then increase over the later half of the decade.

Key Success Factors

Cost competitiveness - Given the chronic overcapacity in the industry, new-building realisations are expected to continue to remain at their low levels. Thus, cost

competitiveness would continue to remain a critical success factor for the industry. Thus, it is essential for shipyards to be able to match up to the labour productivity rates in Korea and Japan. In addition, access to cheap labour and key raw materials would also serve in increasing the cost-competitiveness of shipyards.

Table 2 - Labour Productivity in India

	Labour Output(manhours / Dwt)
Korea average	4.33
Japan average	6.02
Cochin Shipyard	20 - 25
Hindustan Shipyard	> 200

Source: CRISIL Advisory Services

Marketing Network - The levels of productivity at Korean yards can be matched by yards elsewhere only if they have the backing of a stable order book. In addition, a stable order-book would also help in shipyards scheduling and bulk ordering of raw materials. Thus, having a marketing network that is able to build up an order pipeline is critical to the success of any shipyard.

Ship repairs

Ship repair industry in India consists of eighteen dry docks divided equally between the public and private sector. In addition to these, all major ports have wet berths where repairs are also conducted. The main players in this industry are CSL, HSL, MDL and private players such as Western India Shipyards Ltd, ABG shipyard Ltd.. These shipyards undertake repairs for SCI, Indian Navy vessels and other merchant vessels of Indian registration. Some of the private shipyards such as ABG & WISL have been able to obtain orders for repairs of vessels of foreign flags.

Private Indian shipping companies mainly conduct their repairs at foreign ports such as Colombo and Dubai. According to an estimate, almost 50 % of the repair turnover at Colombo port is reported to be from Indian vessels. Ship repair business in India is impacted by the fact that India does not fall on the major trade routes. Ship repair is usually conducted at the time of berthing and loading of vessels at a port, as ship owners prefer to minimise time spent in repair. Hence the largest ship repair centres are ports such as Dubai, Singapore and Colombo which lie on the major trade routes.

Much of the repair work is statutory in nature. All vessels have to undergo repairs at predetermined duration in order to obtain certificates of seaworthiness. In addition, a clearance certificate has to be obtained, while departing from each port confirming the seaworthiness of the vessel.

Ship repairs can be conducted either at dry docks or at wet basins. Dry docks are premium repair facilities that are suitable for carrying out repairs for underwater portions of a ship. Large portion of ship repair jobs is outsourced as quick turnaround is very important in ship repair activities. However repair like shipbuilding is highly labour intensive in nature.

The global ship repair market has an estimated turnover of approximately 8.5 billion USD in 2000. The global ship repair market is witnessing a situation of over-capacity with large fresh capacities being set up in low cost nations such as China, Vietnam and the Baltic region. These are impacting the business in the Western Europe market, which is increasingly specialising in niche higher value markets.

The domestic ship repair market is very small as compared to global ship repair markets both in terms of infrastructure and scale of operations. A comparison of the operations of major global dry docks with Indian repair facilities is given below:

Table 3 - Comparison of ship repair docks

	Dubai Dry docks	Colombo Dockyard	CSL	HSL
Number of ships repaired in 2000 (1999)	NA(227)	195(216)	40(37)	27(19)
Number of docks	3 dry docks and 1 floating dock – focussed on repairs	4 dry docks – mix of ship building & repairs	2 dry dock – one for ship building and one of repairs	1 dry dock for repairs & 1 building dock
General type of ships repaired	VLCC, ULCC, LNG carriers and other large vessels	Tankers, containers, tugues etc	SCI, Indian navy, DCI	SCI Indian Navy, DCI

Source: CRISIL Advisory Services

It is estimated that global ship repair market would grow by 2.1% till 2005 while maintaining a long- term growth of around 2% till 2015⁸. Demand will be driven mainly by regulatory requirements that are growing increasingly stringent.

⁸Ocean Shipping Consultants Ltd.

In India, it has been estimated that the domestic market would grow from Rs 14600 mn in 9th plan to Rs. 19000 mn in 10th plan.

Policy & Regulatory issues for the industry

Taxation related issues

The GoI has effected changes to Section 33AC and Section 115JB in the Budget for 2002-03. This is expected to reduce the tax liability of shipping companies that are planning to earmark profits in a reserve for future capacity expansion, which in turn could improve the order-book position for the domestic shipbuilding industry.

Implementation of the proposed tonnage tax system would also have a positive impact on the profitability of the domestic shipping industry.

Subsidy related issues

Under the current **shipbuilding subsidy** scheme, the price of an ocean going vessel built by an Indian public sector shipyard is allowed to match the lowest quote for an ocean going vessel in an open Global tender. The shipyard is eligible for an additional 30% realisation above the lowest quote, with the differential being paid by the GoI as shipbuilding subsidy. The price for the deal is fixed in either US dollar or Japanese yen terms, and the net realization to the shipyard is calculated after taking into account the prevailing exchange rates.

In addition, the GoI also has an **interest differential subsidy** scheme according to which any Indian owner placing an order on public sector shipyards for ship acquisition and raising funds for the purpose from Indian financial institutions would be eligible to receive an interest differential subsidy wherever the interest rate was greater than 9%. The interest differential subsidy was capped at a maximum of 5% and would be available for up to 80% of the ship acquisition cost.

The subsidy schemes were originally notified in August 1997 and were valid over the period 1997-2002. The Inland Vessel Subsidy scheme is aimed at reducing the capital burden to the prospective Inland Waterways Transport (IWT) carrier, which would enhance their profitability and make the IWT tariff competitive. The scheme has come into effect from 1.4.2002 and will remain in force for a period of 5 years. Besides, Inland Vessel Subsidy Scheme envisages an amount equal to 30% of the ex-factory price of the inland vessel and available to an entrepreneur if the vessel is procured from a shipyard in India.

In the Indian context, where the order book position in respect of shipbuilding is generally weak, ship repair is a better economic proposition.

Capacity Utilisation

Ship building [Commercial & Naval]

HSL's capacity utilisation levels in ship building have been lower than the industry average figures of 30-45% for the domestic shipyards and the global norms of 56-74%. Cochin Shipyard Ltd. (CSL) has reported capacity utilisation levels of 55-70% during the last three years.

The current order book in ship building is estimated to be to the tune of Rs.1880 mn and expected to be executed by 2003-04. There are no other LoI's signed but HSL has bid for ship building contracts to the tune of Rs.1200 mn for Indian Navy and Rs.300 mn for NMPT.

Shipbuilding productivity norm suggested by BICP was 112 manhour / Dwt. The actual productivity has been greater than 200 manhour/DWT at HSL on account of slack order book. As against this, CSL has a productivity level of 22 manhour / Dwt.

Ship repairs

The ship repairs are of two types - one which require the dry-docking of vessels and other which are carried out afloat in the wet - basin. The repairs carried out by HSL in the past have required that repairs be carried out in the wet basin both prior to and after dry-docking of the vessels. The ships coming to the shipyard for exclusive afloat (wet-basin) repairs have been only around 5-8% of the total vessels.

HSL has a dry-dock dedicated to ship repairs of size 244*38 m². The natural width and draft of the channel restricts the capacity of HSL to undertake repairs of vessels of up to 70,000 Dwt. The vessels repaired by HSL in the past include Passenger vessels, Dredgers, Bulk carriers, Oil tankers, Naval landing crafts, Off-shore patrol vessels, Floating dock, survey vessels, Tugs, Coastline carriers and drill ships of ONGC.

Average turnover is 2 ships per month whereas CSL is able to achieve turnover of 3-4 ships per month. HSL can repair upto 2-3 ships in the dry-dock at any point of time. Assuming an average dry-docking days of 15 per vessel, HSL can achieve 4-5 ships per month or 48-60 ships per annum.

Retrofitting

HSL has current order book of medium term repairs of INS Wagli - an F class submarine. The total contract is estimated to be around Rs. 1200 mn and the anticipated date of completion is June 2003. The turnover from retrofitting on this contract is estimated to be Rs.300 mn in 2001-02 and anticipated to be Rs.300 mn in 2002-03.

HSL has plans to grow from the medium term repairs of F class submarine to more sophisticated EKM 877 submarines for Indian Navy. Towards this objective, substantial progress has been made for securing medium term repair of one 877 EKM submarine by HSL to be carried out in collaboration of foreign yard which can provide spares, equipment and technological support to HSL. HSL has not been able to assess the year-wise revenues from the new submarine orders but it has indicated that the approximate turnover on new submarines would be around Rs. 300 mn per annum.

HSL's Market Position

Ship building

HSL's current clients in the ship building business are Port trusts, A&N Administration, Union territory of Lakshadweep. The last order placed by SCI was in 1997 for a 42,750 Dwt bulker. HSL's competitors in shipbuilding are TEBMA, ABG, Bharati Shipyard in the private sector and CSL, MDL in the public sector.

HSL has not been able to secure order for shipbuilding under the current subsidy scheme of the GoI for ocean going vessels. Its marketing efforts are restricted to bidding for PSU contracts and unlike CSL, it has not appointed any brokers for securing international business.

Private shipyard such as ABG and Bharati have reported Revenues of Rs. 970 mn and Rs. 850 mn in 2000-01 respectively. ABG has been able to secure orders from Middle East and has order book of Rs. 3500 mn.

Ship repairs

HSL's clients in the ship repair business are Indian Navy, SCI, DCI, VPT, etc. HSL's competitors in the ship repair business are WISL, CSL, MDL, etc. WISL has been able to secure ship repair contracts from vessels of Indian as well as foreign flag.

WISL, which is focussed on ship repairs, has been able to repair around 48 vessels (31 in dry-dock and 17 for exclusive wet repairs) in 2000-01 with a turnover of Rs. 480 mn. It included 6 vessels of foreign flag.

Retrofitting

HSL has undertaken medium term repairs of F class submarine - INS Wagli and plans to grow to medium term repairs of EKM 877 submarine. This is sought to be achieved by technical tie-up with a foreign yard.

Financial Performance of HSL

The Balance Sheet and Profit and Loss Account of HSL are given below:

Table 4 - Balance Sheet of HSL

BALANCE SHEET (Rs. Mn) As of March 31	2000-01	1999-00	1998-99
Liabilities			
Share Capital	1068	1018	968
Reserves & Surplus	-10904	-10714	-10850
Networth	-9836	-9696	-9882
Long Term Debt	9024	8773	10181
Short Term Debt	0	0	0
Total Debt	9024	8773	10181
Current liabilities & provisions			
Current Liabilities	2843	2411	2895
Provisions	963	1137	165
Total Liabilities	2994	2625	3358
Assets			
Gross Block	1663	1659	1640
Net Fixed Assets	579	611	650
Investments	0	0	0
Current Assets	2416	2015	2708
Total Assets	2994	2625	3358

Source: CRISIL Advisory Services

Table 5 - Profit & Loss Account of HSL

PROFIT & LOSS ACCOUNT	2000-01		1999-00		1998-99	
	Rs. Mn	% of OI	Rs. Mn	% of OI	Rs. Mn	% of OI
Operating income	1666.0	100%	2070.1	100%	1696.8	100%
Total income	1666.0	100%	2070.1	100%	1696.8	100%
Material costs	633.3	38%	1082.6	52%	793.2	47%
sub contracts & offloading expenses	266.1	16%	306.2	15%	287.9	17%
pay & benefits	666.0	40%	639.1	31%	569.9	34%
other expenses	232.5	14%	348.7	17%	269.9	16%
Cost of goods sold	1798.0	108%	2376.5	115%	1920.9	113%
OPBDIT	-132.0	-8%	-306.5	-15%	-224.1	-13%
Interest	276.0	17%	264.1	13%	237.2	14%
Depreciation	58.4	4%	60.0	3%	63.1	4%
OPBT	-466.4	-28%	-630.6	-30%	-524.4	-31%
Non-operating income	54.8	3%	89.2	4%	57.5	3%
Provisions for LD's/future losses	245.3	15%	941.0	45%	0.0	0%
cash adjustments	15.5	1%	-1583.2	-76%	9.8	1%
Write backs of future losses etc.	482.6	29%	35.3	2%	180.0	11%
APBT	-189.8	-11%	136.1	7%	-296.7	-17%
Tax	0.0	0%	0.0	0%	0.0	0%
PAT	-189.8	-11%	136.1	7%	-296.7	-17%
Reported PAT	-189.8		136.1		-296.7	

Source: CRISIL Advisory Services

Ship building and ship repairs each contribute to around 40% of HSL's revenues and retrofitting contributes to the balance 20% of the revenues in 2000-01. The share of shipbuilding has come down while the share of retrofitting has gone up over the last three years.

HSL had accumulated losses of Rs. 10904.7 mn as of March 31, 2001. HSL also has capital reserves of Rs. 0.95 mn as on 31st March 2001. The networth of the company is hence negative Rs.9836 mn.

GoI has approved a capital restructuring of HSL to the tune of Rs.5911.3 mn by way of write-off of loans, interest etc. to the tune of Rs. 4709.3 mn and conversion of

loans into equity to the tune of Rs. 1202.0 mn. This is to be w.e.f 31.3.95. This capital restructuring has not been implemented in the books of account of the company till date due to attraction of "Minimum alternate tax". The company had accrued the interest on the written-off portion of the debt on its books till 1996-97. After the approval on the restructuring in August 1997, HSL stopped accruing interest on the written-off portion of the debt.

In 1999-00, HSL wrote-back the interest accrued on the written-off portion of the debt for 1995-96 and 1996-97. This is reflected in the cash adjustments for 1999-00 of Rs.1583.2mn. and the increase in the networth of the company in 1999-00 over 1998-99.

Business Plan of HSL

HSL has the following business plan:

Ship building

- Aggressive marketing for orders from coastal shipping and Inland Waterways.
- Achieve turnover of Rs. 50 mn from fabrication of industrial structures.
- Secure contracts for Off-shore platform construction and maintenance activities from ONGC

Ship repairs

- Improve ship repair turnover to Rs. 900 mn by 2002-03, Rs. 1200 mn and Rs. 1500 mn by 2004-05 by acquisition of floating dock. The capex of Rs. 225 mn for acquisition is proposed to be met by assistance from Gol.

Retrofitting

- Secure order for medium term repairs of one EKM 877 submarine from Indian Navy by collaboration with foreign yard and that considerable progress has been made towards this objective.
- Grow from submarine repairs to construction of submarines in 5-7 years period as HSL has geographical advantages well suited for submarine construction. These include deep water and sheltered port, Head quarters of Eastern Naval command, Naval dock yard, Submarine base, ship building center of ATV project.

- HSL has indicated that the approximate revenues on new submarine would be Rs. 300 mn per annum.

Strategy for profitability improvement

HSL has indicated the following strategy for profitability improvement

- Rationalisation of manpower by reduction of 700 employees through VRS and redeployment through training.
- Formulate IT plan to improve productivity.
- Set up core business group to secure orders.

Order book position in ship building

HSL's closing order book in ship building was of 60,480 Dwt. Apart from this, HSL has submitted the bids for following vessels :

- 850 m³ dredger for NMPT (Rs. 300 mn approx).
- 5 no. 25 T B.P Tugs for Indian Navy (Rs. 700 mn approx).
- 4 no. 500 T water barges for Indian Navy (Rs. 500 mn approx).

As per HSL, considerable progress has been made towards securing the contract for medium term repairs of EKM 877 submarine from the Indian Navy

Industry Assessment

The shipbuilding industry world-wide is faced with severe competitive pressure from the Korean, Japanese and the Chinese shipyards. In India, the domestic shipbuilding industry is dominated by the public sector shipyards, which are either under the administrative control of the Ministry of Shipping or Ministry of Defence.

Low labour productivity along with the rigid labour laws have resulted in the shipbuilding industry in India being restricted to construction of mostly small / medium scale vessels. The subsidy schemes and the fiscal incentives given to encourage domestic ship building industry have not been sufficient to make the shipbuilding industry in India a profitable proposition.

One of the reasons for the failure of the shipbuilding industry to take-off is that the subsidy scheme for ocean going vessels was restricted to PSU shipyards only. CSL is the only shipyard, which has availed of subsidy under the current subsidy scheme. Shipping Corporation of India (SCI) is the only entity which has placed new shipbuilding contracts with CSL but now with the impending privatisation of SCI, even the client base of CSL is under threat.

The private shipping lines prefer to order the new vessels from foreign shipyards, which not only offer competitive prices but also tight delivery schedules and better credit terms to the shipping companies.

The ship repairing industry in India has also not thrived due to the low confidence of the shipping companies in the capabilities of the shipyards to turn-around the vessels in the scheduled time frame. The ports in India are also not large enough by global standards and do not lie on the major shipping routes such as Dubai, Singapore or Colombo shipyards.

Market Assessment

HSL has not been able to secure any contract for construction for ocean going vessel under the current subsidy scheme, which is in place from 1997. SCI has not placed any order for construction of vessels with HSL since 1997. The reputation of HSL in the market place has been eroded due to the poor delivery schedules resulting in slack order book position. The current order book of HSL is mostly for small tugs / vessels except the 700-passenger vehicle contract placed by Union Territory of Lakshadweep.

HSL can construct Handymax class of vessels. It is understood that it can deliver up to 1.5 handymax class of vessels on a stable order book. The demand for this class of vessels is adequate but strong marketing efforts are needed to secure order for these vessels under the present conditions. Hence HSL would need to focus on small vessels construction during the short term and step up marketing efforts to secure contracts for bigger vessels and overseas business.

HSL can undertake ship repair jobs for up to 80,000 Dwt vessels. HSL currently repairs around 25 ships per year or 2 ships per month. WISL, which is located on the East coast, is able to repair around 50 ships per year, CSL is able to repair up to 3-4 ships per month. HSL has a location disadvantage that it does not fall on the major shipping route, but even then with stepped up marketing efforts, it can repair up to 4-5 ships per month or 48-60 ships per annum.

HSL is actively pursuing to secure order for medium term repairs of an EKM 877 submarine from the Indian Navy. HSL has indicated that the revenues from submarine retrofitting are expected to be at current levels of Rs. 300 mn per year. HSL has also stated that the submarine construction has vast potential of changing the business potential of HSL in the positive direction. However, in the absence of any concrete plans towards achieving these objectives, it has been assumed that HSL would continue to generate revenues of Rs. 300 mn per annum from submarine retrofitting activity.

HSL has not undertaken major repair and maintenance in view of the continuing operating losses over the last few years. This may have impacted the efficiency of the Plant & Machinery. The productivity levels of the employees are also low, as the work processes are not IT enabled.

SWOT Analysis

Strengths

- Two dry-docks, one dedicated to ship building and other to ship-repairs. The shipbuilding dock is partly being utilised for retrofitting of the submarine and partly for ship building activity.
- HSL is capable of manufacturing Handymax size vessels of upto 50,000 Dwt and repairing up to 70,000 Dwt vessels. It has built passenger vessels, handymax class of vessels for SCI and repaired passenger vessels, bulk carriers, Naval landing crafts, oil tankers etc. in the past.
- Located close to Eastern Naval command, as well as Naval Dockyard at Visakhapatnam and hence it is well suited for submarine repairs & construction.
- HSL has gained expertise in medium term repairs of submarine as it is currently carrying out repairs of INS Wagli, an F class submarine for Indian Navy

Weaknesses

- The natural draft and width of the channel restricts the capacity of the shipyard to build vessels of up to 50,000 Dwt and repair ships of up to 70,000 Dwt.
- A huge workforce of 4631 employees as on 31.3.2001. The workforce of HSL is ageing with 27% of the workforce more than 50 yrs of age and 44% between

45-50 yrs of age. Hence natural attrition due to retirement is expected to be low. The administrative to technical manpower ratio is also reported to be high at 1:2.5 respectively.

- The yard lags behind other yards in terms of productivity and application of IT. No major capex on the assets in the recent past may have impacted the efficiency of the plant and machinery.
- The poor delivery record in the past has impacted the reputation of the yard and private shipping agencies are unwilling to do business with the yard.
- The marketing efforts of the yard are not sufficient to secure business by competing with the other private yards. Unlike CSL, there are no shipping brokers appointed to develop international business opportunities.
- Negative networth and no cash credit from banks has impacted the working capital management and led to diversion of advances from customers towards payment of salaries to the employees, resulting in delays in execution of orders.
- The delays in execution could result in payments of Liquidated damages to the customers.

Opportunities

- The subsidy scheme for construction of vessels plying on Inland waterways is expected to generate more business for Indian shipyards.
- Shipbuilding opportunities exist in the international market. There is expected to be a large requirement for double hull tankers due to latest International Maritime Organisation (IMO) regulations. However, in the Indian context, shipbuilding industry is dependent on Government subsidy. To take advantage of the Global opportunities, HSL has to be globally competitive.
- The ageing of Indian fleet would require replacement which could be done either through new ships or second hand acquisitions. However, with the privatisation of SCI, HSL may have to compete with the global shipyards to secure this business.
- The ship repairs business is an area of growth - it is understood that major dry-docks such as Colombo dockyard undertakes repairs of around 200 ships per annum. Even private shipyards such as WISL located at Calcutta have undertaken repairs of around 48 ships this year.

- HSL's strategic location could be leveraged to secure medium term repair contracts for 877 EKM class submarines for Indian Navy.

Threats

- Even though HSL has not been able to secure a contract for an ocean going vessel and avail of subsidy scheme by the GoI, scrapping of the subsidy scheme could impact the future business potential of the company.
- The high employee strength and the employee costs are resulting in operating losses to the company and impacting the capability of HSL to sustain its business. Due to the operating losses, HSL is unable to service the SBI debt of Rs. 1732 mn on the books of the company or the GoI, resulting in interest accruals every year in the books of the company.

As indicated earlier, for a variety of reasons, HSL does not have the capability to meet the opportunities of the global shipbuilding market. HSL does not have any cash credit and has resorted to diversion of advances from customers towards payment of salaries for its employees. This has impacted the operations of HSL and it is estimated that around Rs. 600 mn would be required as on 31.3.02 to meet the working capital deficit.

Need for Restructuring

Subsequent to the detailed analysis of HSL's operations, financial performance, market position and the industry characteristics, it is felt that there is an urgent need for restructuring of the company, to be considered together with its privatisation. To make it viable for privatisation and attract interest of bidders, there is an urgent need to reduce its employee costs in order that HSL starts generating positive operating profits.

The analysis of the various businesses indicates that HSL needs to focus on ship-repairs, which provides a higher contribution as compared to ship-building. The Ministry of Shipping had ordered a viability study and restructuring of HSL in September 2001. The Committee, set up by MoS, submitted its report in November 2001 and recommended the following measures to make the shipyard viable :

- Complete write-off of SBI debt from the books of HSL. This would require payment of Rs. 1870 mn to SBI, in case SBI agrees to settle the dues at Rs. 1870

mn and waives off the interest and interest on interest of Rs. 1420 mn. Else, payment of Rs.3290 mn would have to be made to SBI.

- Write off of GoI loan and interest as on 31.12.01 to the tune of Rs. 460 mn.
- Bridging the working capital deficit by infusion of funds of Rs. 740 mn.
- VRS and retrenchment of 50% of employees amounting to Rs. 1300 mn
- Exemption from MAT liability on approved capital restructuring and the proposed restructuring.
- Cash support to meet the cash losses expected during the years 2001-02 & 2002-03.

The cost cutting measures recommended by the Committee are :

- Immediate roll back of retirement age to 58 years
- Reduce expenditure on offloading within the next six months in ship repairs, ship building and retrofitting to the extent of 80% in value terms. The Committee has projected that this would result in approximate savings to the tune of Rs. 100 mn and other cost saving measures would result in savings of Rs. 50 mn. However as per HSL, the offloading expenses are essential and the savings projected by the Committee may not be fully achievable.
- Reduction of manpower by 50% within the next two years through VRS funded by the GoI. The approximate cost of VRS is Rs. 1300 mn.

Other key recommendations / findings of the Committee are:

- The yard presently utilises the ship building dock partly for repairs and partly for vessel construction. The building dock may be fully utilised for ship repairs and retrofit of Naval crafts.
- The yard may not be able to compete successfully in tenders for larger vessels. Therefore, yard should take up orders mostly for small crafts and steel structures and build larger vessels only if contribution from larger vessel order is sufficient to meet part of the fixed expenses.

The shipyard is technologically far behind other modern shipyards. Since the yard may not be able to generate enough resources to fund the investments in IT and

modernisation, continued support of the GoI may be required by way of plan provisions. It is, therefore, evident that to improve its financial position and performance, major capital restructuring is needed. In this context, the cost of closure vis-à-vis cost of minimum restructuring concurrent with disinvestment should be worked out.

According to an estimate done by CRISIL Advisory Services, the estimated cost of closure of HSL (net cash outflow to the GoI) as of 31.3.01 would be of the order of Rs.1747.3 mn.

The table below indicates that the estimated cash out-flows to the GoI are likely to be lower in the case of a closure as compared to a restructuring and disinvestment:

Table 6 - Cost of closure v/s Cost of restructuring & disinvestment

Cost of closure	Rs. Mn
Cash inflows to GoI	
Claims of GoI on principal - Rs. 283 mn and interest Rs. 95.3 mn	378.3
GoI claims on MAT (on account of the approved capital restructuring)	246.2
Net inflows to GoI	624.5
Cash outflows to GoI	
Employee liabilities - VSS & Gratuity (VSS cost per employee @ Rs. 0.5 mn)	2371.8
Net cash outflows to GoI	~1750
Cost of restructuring & disinvestment	Rs. Mn
Cash inflows to GoI	1008-1308
Sale of 100% equity shareholding in HSL	
Cash outflows on account of restructuring	
Cost of VRS (for VRS to 50% or 2158 employees)	1075
Cost of settlement of SBI debt (SBI debt being guaranteed by GoI)	1870-2902
Fresh equity infusion (for W.C infusion and meeting MAT liability)	600
Net cash outflows to GoI	2200- 3500

Source: CRISIL Advisory Services

However, the anticipated cash inflow through disinvestment, as indicated above, is just a preliminary estimate. The actual amount may be much more, depending on various factors including market conditions, control premium that the prospective buyer may offer and the synergy that the buyer may achieve through this acquisition.

Ship repair business generates positive value and hence may interest potential investors seeking entry/expansion of ship repair business. In such case, the net outflows may be lesser, compared to the estimated outflows of a closure situation.

It may be noted that the net-worth of HSL has been fully eroded and the company has been incurring operating losses consistently for the last three years.

The GoI has written-off debt and approved capital restructuring to the tune of Rs. 5911 mn as of 31.3.95 and further re-structuring would be needed to make HSL potentially viable and, hence, disinvestable. The GoI has been consistently infusing cash to the tune of Rs. 100-150 mn in HSL for the last three years by way of equity / debt.

Recommendations

Based on the analysis above, it is evident that for a variety of reasons, turn around prospects of HSL do not appear to be bright. Even this level of performance has been possible owing to the existing subsidy schemes. As such, together with reduction of surplus staff through VRS, a suitable restructuring package has to be developed, in consultation with prospective bidders, which can be implemented as an integral part of the privatisation exercise.

However, before selection of the strategic buyer, the defence related issues require to be sorted out in consultation with the Navy. Proper screening of potential buyers is necessary in view of HSL's strategic location close to Eastern Naval Command and Naval Dockyard at Visakhapatnam. Given this background and the need to encourage private sector participation in defence sector, wherever feasible and desirable, private sector players who have the necessary technical, managerial and marketing competence to undertake merchant ship building and repairs as well as the suitability to serve the needs of the defence sector could perhaps be potential targets. The Commission feels that delaying or postponing privatisation of HSL merely on the ground that it caters to naval needs is not justifiable. If need be, part of the facilities created with funds from Navy/Ministry of Defence and meant exclusively to meet Naval demands may be separated either as a demerged entity or in the form of assets and handed over to the Navy, before privatisation of HSL is finalised.

In view of the above, the Commission recommends disinvestment of the entire GoI shareholding in HSL to a strategic buyer. The restructuring package, formulated in

consultation with prospective buyers, should be concurrent with the disinvestment programme. This would help in bringing in productivity improvements and marketing ability needed to turn around HSL. In case the process of disinvestment does not succeed, owing to lack of interest from prospective buyers, closure of HSL may be inevitable.

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