

CHAPTER XVI: DEPARTMENT OF SHIPPING

Dredging Corporation of India Limited

16.1 Delay in acquisition of trailer suction hopper dredgers and its impact on the performance of the Company

Introduction

Dredging is primarily of two types, namely, maintenance dredging, which is a regular activity that ensures that channels and berths are maintained at the required depth and capital dredging, which involves channel deepening and widening to accommodate larger vessels. Maintenance dredging is carried out by Trailer Suction Hopper Dredgers (TSHDs) and capital dredging is mainly carried out by Cutter Suction Dredgers (CSDs). Maintenance dredging is the core activity of Dredging Corporation of India Limited (the Company). The turnover from maintenance dredging activity of the Company ranged between 70 per cent and 97 per cent of the total turnover of the Company during the last five years ended 31 March 2010.

The Company's clients are the major ports, Indian Navy and shipyards. There are 12 major ports in the country functioning as autonomous bodies/ corporate body under the Ministry of Shipping (Ministry). All major ports, except Tuticorin, which has a rocky sea-bed, hire dredgers for carrying out maintenance dredging. Besides these, there are 187 non-major ports, the maintenance of which is carried out by indigenous dredging companies.

The Company had 10 Trailer Suction Hopper Dredgers (TSHDs) as on 31 March 2010 with an annual dredging capacity of 73.60 M cum. The economic life of the dredger was assessed as 19 years[♦]. Of the 10 dredgers, five dredgers were of age exceeding 19 years and as such served their full economic life as of 1 April 2005 and the oldest being 31 years old as of 1 April 2005.

Scope of Audit

The thematic draft paragraph covers examination of records relating to planning for replacement of dredgers and whether the replacements were made in time and its impact on the working of the Company in terms of profitability and turnover during the period 2005-06 to 2009-10.

Audit findings

16.1.1 Acquisition/ replacement plan

16.1.1.1 Dredger is a highly specialized vessel with increasing degree of technological sophistication. It is observed in Audit that the Company had not been able to meet the Five Year Plan (FYP) projections in respect of acquisition/ replacement of dredgers set for the Company as indicated below:

[♦] The life of dredger is taken as 19 years for IRR calculation during the DPR prepared in 2004.

Plan & Period	Targets for the Company	Compliance by the Company
Eight FYP (1992-1997)	➤ Decommission and replace four dredgers of the Company.	➤ No dredger was decommissioned or replaced.
Ninth FYP (1997-2002)	➤ Replacement of dredgers which are more than 15 years old.	➤ Three TSHDs only were procured as against five TSHDs which had completed 15 years by the end of the plan period.
Tenth FYP (2002-2007)	➤ To procure one TSHD.	➤ No TSHD was procured.
Eleventh FYP (2007-2012)	<ul style="list-style-type: none"> ➤ The Company to procure four TSHDs. ➤ To carry out retrofit to old dredgers 	<ul style="list-style-type: none"> ➤ Order placed for procurement of only two TSHDs (April 2010). These two dredgers would be joining the fleet of the Company by December 2012 & June 2013. ➤ Even though approval was accorded for ₹ 450.00 crore for retrofits, no retrofits were carried out.

16.1.1.2 The Management in its reply (October 2010) stated that the Company has a ‘Dredger Procurement Policy’ as reflected in the FYP outlays of the Company. The FYP outlays are proposed taking into consideration the prevailing conditions in the market like the capacity and type of dredgers required by different ports, procurement cost of dredgers, financial position of the Company, the expected/ planned maintenance etc.

16.1.1.3 The fact remained that the Company did not achieve the targets fixed as reflected in the FYP. The Company could initiate procurement action only for 2 TSHDs as against the targets of 4 TSHDs by April 2010. No procurement action has been initiated for balance 2 TSHDs till date (November 2010).

Recommendation

The Company needed to make a comprehensive plan for acquisition with timeframe and milestones so as to achieve the FYP targets.

16.1.2 Acquisition process and delays

16.1.2.1 The Company initiated action for procurement of one TSHD in April 2002 but the procurement action was completed successfully only in April 2010, after a period of eight years, when the order was placed on IHC Holland for two 5000 cum TSHDs. The details of tenders floated by the Company and the reasons for their cancellation are given below:

Sl. No.	Tender Date, Type & Quantity tendered	Details of parties qualified	Reasons for cancellation
1.	22 July 2002, Global Notice Inviting Tender (GNIT), one 5000 cum TSHD	<ul style="list-style-type: none"> ➤ IHC Holland, Netherlands (IHC) ➤ Volharding shipyard, Netherlands 	<ul style="list-style-type: none"> ➤ The Company decided to discharge the tender, disregarding the recommendation of the Tender Scrutiny Committee on the pretext that competitive rates might not be obtained. ➤ Pre-Qualification Criteria (PQC) was relaxed.
2.	28 September 2002, GNIT, one 5000 cum TSHD	➤ IHC	➤ To ensure competition, GNIT was cancelled and PQC was further diluted.

3.	7 November 2002, GNIT, one 5000 cum TSHD	<ul style="list-style-type: none"> ➤ IHC ➤ Mitsubishi Heavy Industries, Japan (MHI) ➤ IZAR Gijon, Spain (IZAR) ➤ Peene-Werft GMBH, Germany 	<ul style="list-style-type: none"> ➤ In light of CVC guidelines (December 2002) on PQC criteria, the company decided to review and reframe the PQC criteria and the tender was cancelled.
4.	18 February 2003, GNIT, one 5000 cum TSHD (Additional safeguards were included (April 2003) and tender documents re-issued in September 2003)	<ul style="list-style-type: none"> ➤ IHC ➤ MHI ➤ IZAR ➤ Mazagon Dock Limited, Mumbai (MDL) ➤ Peene-Werft GMBH, Germany (qualified but did not submit the bid) 	<ul style="list-style-type: none"> ➤ All the four parties did not accept (October 2003) the 'Consequential Losses' clause leading to cancellation of tender (February 2004).
5.	31 March 2004, Limited Tender Enquiry (LTE) to only five qualified parties in response to GNIT issued on 18 February 2003	<ul style="list-style-type: none"> ➤ IHC ➤ IZAR ➤ MDL 	<ul style="list-style-type: none"> ➤ IHC, IZAR and MDL submitted their bids in May 2004. Price bids were opened in September 2004. ➤ The bid of MDL was rejected as the yard did not agree for Performance Guarantee. ➤ The Company decided to place order on IHC (L1) at an evaluated price of ₹ 292.07 crore (January 2005). ➤ Tender was discharged (December 2005) based on the advice received (November 2005) from Solicitor General of India.
6.	26 February 2006, GNIT, three 5000 cum TSHDs (Based on M/s. Price Waterhouse Cooper's estimation (November 2004) of additional capacity required)	<ul style="list-style-type: none"> ➤ IHC 	<ul style="list-style-type: none"> ➤ The price offer of IHC received on 10 May 2006 was valid only up to 30 November 2006 and was extended until 17 December 2006. However, the price bid was opened on 17 December 2006. The price validity was extended five times till 17 July 2007. ➤ The Company initially submitted the proposal to Public Investment Board (PIB) on 8 February 2007. Further information sought by PIB was provided by the Company only on 14 June 2007. PIB forwarded the proposal to Cabinet Committee on Economic Affairs (CCEA) on 3 July 2007. CCEA cleared the proposal on 20 July 2007. ➤ In spite of the Company reminding the Ministry of the status on 13 July 2007 and 17 July 2007, the Ministry approval was received only on 27 July 2007. ➤ IHC declined (2 August 2007) to extend validity of offer leading to cancellation of tender.
7.	24 September 2007 LTE to five PSU yards, three 5000 cum TSHDs	<ul style="list-style-type: none"> ➤ Cochin Shipyard Limited, Cochin (CSL) in collaboration with IHC 	<ul style="list-style-type: none"> ➤ CSL submitted the offer in October 2007. ➤ CSL, however, did not agree to provide bank guarantees for release of stage payments and Security Deposit/ Performance Guarantee as insisted by the Company. ➤ Tender was discharged in January 2008.

8.	1 September 2008, GNIT, three 5000 cum TSHDs	➤ IHC	<ul style="list-style-type: none"> ➤ IHC submitted its offer in November 2008 and price bid was opened in February 2009. ➤ The Detailed Project Report (DPR) and PIB note were forwarded by the Company in May 2009. ➤ PIB during meeting held in (August 2009) directed the Company to initially procure two TSHDs although approval was sought for three TSHDs, as no budgetary support was being sought from the Government and the cost was to be borne from internal resources of the Company. ➤ Cabinet Committee on Infrastructure (CCI), however, approved (February 2010) the capital outlay of ₹ 1570.21 crore (estimated cost - ₹ 1455.89 crore) for three TSHDs. ➤ The Company eventually placed order on IHC (April 2010) at a cost of ₹ 916.68¹ crore, which was found to be higher by ₹ 265.76 crore², as compared to the previous quote of May 2004.
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16.1.2.2 In this regard, the following observations are made:

- The decision of the Company to cancel the tenders floated in July 2002, lacked justification in view of the following:
 - (i) having floated global tenders, the number of bids received could not be a limiting factor for going ahead with the procurement; and
 - (ii) all the previous procurements were from IHC Holland only substantiating the fact that this was a reliable source.

This cancellation led to inordinate delay extending to eight years.

16.1.2.3 The Management in its reply (October 2010) contended that the Company was striving to obtain better response by relaxing PQC initially in 2002. The tenders floated from 2003 to 2007 were cancelled for reasons beyond the control of the Company.

16.1.2.4 The contention of the Management was not acceptable as the Company floated GNIT and then ignored the recommendation of the Tender Scrutiny Committee in 2002 of opening the price bids. In respect of subsequent periods, apart from the reasons beyond the control of the Company, there was also delay on the part of the Management in finalising tenders floated.

¹ Euro 145945000 (Euro 75480000 + Euro 70465000) at the rate of ₹62.81 per Euro (rate applicable as of 6 February 2009 (date of opening bid))

² ₹916.68 crore – ₹ 650.92 crore (₹325.46 * 2), that is, Euro 47.30 million per dredger at the rate of ₹56.40 per Euro as on 7 September 2004 (date of opening bid) after loading 22 per cent for change of technology from Single Tube to Double Tube.

16.1.3 Impact of using old dredgers

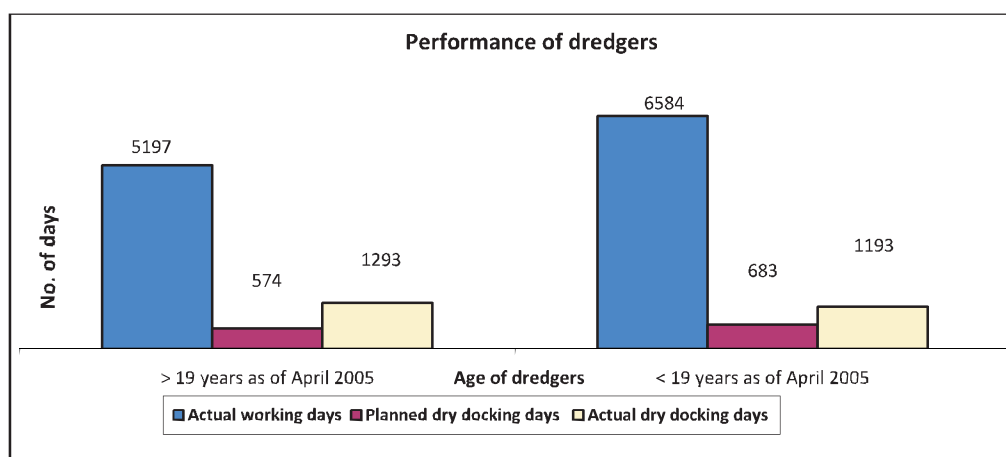
16.1.3.1 Increase in dry dock (maintenance) expenditure

It was observed in Audit that the turnover of the Company from maintenance dredging activity remained static but the profit decreased from ₹ 156.00 crore during 2005-06 to ₹ 83.15 crore during 2009-10. One of the main factors for decrease in profit, the turnover remaining constant, was the dry dock expenditure. The dry dock expenditure during 2005-06 was ₹ 40.96 crore as against ₹ 85.01 crore during 2009-10.

It was further observed in Audit that during 2005-10, the dry docking expenditure in respect of dredgers which had completed 19 years as of 1 April 2005 was ₹ 159.52 crore whereas the dredgers aged below 19 years had incurred ₹ 148.73 crore. The expenditure on dredgers below 19 years would have been much lesser had there not been compulsory dry docking expenditure of ₹ 38.22 crore during 2009-10.

16.1.3.2 Increase in dry dock repair time and less availability of dredgers

Apart from increase in dry dock expenditure, there was abnormal increase in actual dry dock repair periods as compared to the planned dry dock period particularly in respect of dredgers aged more than 19 years as of April 2005. The increase in actual dry dock days over planned days impacted adversely the availability of dredgers for operations. The performance of dredgers aged above 19 years as of 1 April 2005 and otherwise is depicted below:



This had in turn led to decrease in utilization of capacity from 67.50 M cum in 2005-06 to 43.39 M cum in 2008-09* as against an available capacity of 73.60 M cum throughout 2005-10.

16.1.3.3 Loss of business opportunities

Ports like New Mangalore and Mumbai stipulated prequalification criteria by specifying the age of dredgers that is, not exceeding 15 years. The Company did not fulfil the pre qualification criteria as regards to the age of the dredgers. This apart, there was shortage

* The base for calculation of capacity has been changed during 2009-10 making it not comparable with the previous four years.

of dredgers. Consequently, the Company was not able to participate in maintenance dredging works of ₹ 345.61 crore[▼] during the last six years ended 31 March 2010.

The Management in its reply (October 2010) accepted the audit view.

16.1.4 Monitoring by the Board

16.1.4.1 The Board is responsible for providing stewardship and direction for the effective functioning of the Company. It was, therefore, imperative that it monitored the customer requirement vis-à-vis the capability of the Company and took timely action to maximise revenue generation potential.

16.1.4.2 A review of the functioning of the Board of Directors revealed that the Company was in immense need to increase its fleet so as to increase its operations. 70 Board Meetings were held during the period 2002-2010 and the issue of procurement of dredgers was discussed 32 times. A review of the Board Meetings held during this period shows that:

- Though the Board initiated action for procurement of dredgers in April 2002, the investment appraisal prepared by reputed professional organizations (as per criteria stipulated by DPE) for incurring capital expenditure was completed only in January 2005. The delay in preparation of appraisal was not monitored by the Board.
- The tender for procurement of dredgers was floated in March 2004 and the price bids for tender were opened on 7 September 2004 after delay of 4 months from the date of receipt of price bids. Though, the Board met three times during this period, the issue was not discussed.
- Similarly, the price bid in response to GNIT floated in February 2006 was opened on 17 December 2006 after a delay of seven months from the date of receipt of bid. A revised note in this regard was forwarded to PIB on 14 June 2007. During the period from 10 May 2006 to 14 June 2007, the progress was discussed by the Board in only five meetings out of ten meetings held.

16.1.4.3 Board did not ensure effective monitoring, resulting in planned replacement of dredgers not taking place fully.

Recommendation

The Board should effectively monitor planning for and actual acquisition of dredgers.

The matter was reported to Ministry in December 2010; reply was awaited (February 2011).

[▼] *Mumbai Port for the years 2004 – 08 (₹87.73 crore); Cochin Port Trust for 2005 – 06 (₹27.50 crore) and 2007 – 10 (₹204.95 crore); Marmugoa Port for the year 2007 (₹14.00 crore); Southern Naval Command, Kochi (₹5.29 crore) and Western Naval Command, Mumbai for the years 2008 – 11 (₹6.14 crore).*

16.2 Loss due to failure in specifying measurement method in agreement**Failure to ensure method of measurement of dredged quantity in agreement resulted in a loss of ₹ 16.06 crore.**

Cochin Port Trust (CoPT) offered (April 2006) annual maintenance dredging work for the year 2006–07 on nomination basis to Dredging Corporation of India Limited (Company) for ₹ 30.90 crore for an indicative quantity of 11.10 M cum of material. The Company accepted the offer and undertook (May 2006) the dredging work without finalizing the terms and conditions.

The said dredging work involved a crucial issue of methodology for measurement of the quantity dredged. Neither CoPT clarified, at the time of making a request to the Company about the methodology of measurement of quantity nor the Company specified at the time of communicating its acceptance of the offer, the methodology to be used in measuring the dredged quantity. As a result, the methodology for measurement of dredged quantity remained a grey area.

There are two commonly used methods for the measurement of quantity dredged: (i) in-situ method, and (ii) hopper volume method. Volume of material dredged on in-situ basis is determined by calculating the volume between the pre-dredging depth and the post-dredging depth. So far as hopper volume method is concerned, the volume of material dredged is determined on the basis of volume gathered in the hopper (the front end of the dredger where the dredged material is stored before dumping elsewhere). The hopper volume tends to be higher than the in-situ volume due to lower density of dredged material in the hopper. As the measurement methods have financial implications, the industry has adopted a practice of specifying the measurement method in the agreement so that no ambiguity remains on this front.

In the instant case, the Company did not ensure that the methodology of measurement was agreed to between it and CoPT before actually taking up the dredging work in May 2006. The Agreement for the work entered into between CoPT and the Company in October 2006, six months after start of actual operations, was silent about the measurement method.

The Company dredged a total quantity of 18.20 M cum on hopper volume basis and lodged total claim of ₹ 52.21 crore¹ with CoPT. CoPT converted the hopper volume quantity to in-situ volume of 12.13 M cum and made a payment of ₹ 34.46 crore². Thus, due to failure of the Company to safeguard its financial interests by ensuring agreement on the methodology of measurement of quantity dredged, the Company lost the revenue of ₹ 17.75 crore³. The actual cost incurred by the Company on this job was ₹ 50.52 crore, thus, resulting in a loss of ₹ 16.06 crore to the Company.

The Management in its reply (October 2010) mainly contended that the Company signed the agreement as per the tender conditions and the Company was expecting that the additional quantity dredged could be proportionately settled by CoPT since the contract value of ₹ 30.90 crore was for the indicative quantity of 11.10 M cum. As the agreement

¹ ₹30.90 crore lumpsum price + ₹21.31 crore for the additional quantity of 7.10 M cum dredged.

² ₹30.90 crore – lumpsum price + ₹2.88 crore for additional quantity + ₹0.68 crore for fuel escalation cost.

³ Difference between claim lodged for 18.20 M.cum (₹52.21 crore) and realization of ₹34.46 crore

was silent about methodology of measurement for quantity dredged, the Company should have negotiated the terms and conditions of the agreement and safeguarded its interest before the commencement of work.

Recommendation

The Company should finalize terms and conditions before commencement of work.

The matter was reported to Ministry in August 2010; reply was awaited (February 2011).