CONVERSION OF BULK TERMINAL TO CONTAINER TERMINAL JNPT , NAVI MUMBAI

The Project

To convert existing Bulk terminal at Jawaharlal Nehru Port Trust (JNPT) to container terminal. The estimated cost of the project will be Rs. 9100.0 million (USD 186.0 million)

Project Description

JNPT has been created to provide modern handling facilities for container and dry bulk (fertilizers and food grains) traffic. Though the traffic build up was slow in the initial years of operations, there has been a tremendous growth in the container traffic over the years and it has surpassed the projections. At the same time however, the bulk traffic has been below projected levels. During the year 2001-02, port has handled 1.54 million tonnes of container traffic and it is estimated to increase to 2.4-2.7 million tonnes by 2005-06. In view of the traffic trends, JNPT has decided to convert its existing bulk terminal to container terminal.

| Operating Agency Address: Administration Building, Sheva- Navi Mumbai- 400707 Tel: 091- 9502-7242290 Fax: 091- 9502-7242642 Website: www.jnpt.com Contact person: Chief manager, Transportation and Planning. | | |
|--|---|--|
| Gestation Period | The project in the completed in princes of a position of a position | |
| Revenue Revenues generated through operations of the terminal. Generation | | |
| Status of the Project | JNPT has invited proposals for the same. | |

Project Benefits:

Capacity addition of around 1.2 million tonnes for container handling.

Status of Government Clearances needed for Successful implementation of the project

| No. | List of government clearances needed | Status |
|-----|---|-------------------|
| 1. | Proposal sent to Ministry of shipping for approval | Approval awaited. |
| 2. | Proposal sent for clearance from Ministry of Environment and Forest | Approval awaited. |
| 3. | Clearance from Mumbai Port Trust | To be discussed. |

Details of the project

7

Location

The project is located at JNPT at Nhava Sheva in Navi Mumbai.

Project details:

The existing bulk terminals will be redeveloped through following modifications to handle container cargo.

- 1. Widening of berths.
- 2. Widening of service berths.
- 3. RMQC rails to be extended to full length of the jetty.
- 4. Increase in the spacing between RMQC rails.
- 5. New bridge approach.
- 6. Widening of southern approach bridge.
- 7. Relocation of lightening mass clear of crane back reach. Provision of additional masts.
- 8. Reclaimation of the lagoon behind existing berths.
- 9. Laying of new escape line for locos between existing two rail lines.
- 10. Demolition of food shed, fertilizer shed and wagon bag loading shed.

Proposed Implementation Plan

The project will be implemented on BOT basis through private sector participation.

DEEPENING AND WIDENING OF MAIN HARBOUR AND JAWAHARLAL NEHRU PORT CHANNEL

The Project

To undertake deepening and widening of the main harbour channel of Jawaharlal Nehru Port Trust.(JNPT). The estimated cost of the project is Rs. 7000.0 million (USD 140.0 million).

Project Details

JN Port shares 22.5 km long main harbour channel with Mumbai port. Mumbai harbour channel is presently maintained to a depth of 10.7 to 11.0 mts. below Chart Datum. JN port has a channel length of 7.2 kms which is maintained to a depth of 11.0 mts below Chart Datum. At present, large size vessels having a draught upto 12.5 mts. navigate through Mumbai harbour channel and JNP channel, making use of tidal window. Availability of sufficient draught in the port is necessary for optimum utilization of capacity and faster turn around of larger vessels.

| Operating Agency | Jawaharlal Nehru Port Trust (JNPT) Address: Administration Building, Sheva- Navi Mumbai- 400707 Tel: 091- 9502-7242290 Fax: 091- 9502-7242642 Website: www.jnport.com Contact person: Chief manager, Transportation and Planning. |
|-----------------------|---|
| Gestation Period | The project will be taken up in 2003-04 and will be completed in phases over a period of 2 years. |
| Revenue Generation | Revenues generated through operations of the terminal. |
| Status of the Project | JNPT has invited proposals for the same. |

Project Benefits:

> Deepening and Widening of the main harbour will help in providing draught to cater to

MARINE CHEMICAL TERMINAL

The Project:

To develop an Integrated Chemical Terminal for handling Liquefied Natural Gas and all the grades of liquids/ chemicals including refrigerated/pressurized liquefied gases at Jawaharlal Nehru Port Trust (JNPT). The estimated cost of the project is Rs. 30000.0 million (USD 610.0 million).

Project Details:

JNPT proposes to develop an Integrated Chemical Terminal for handling Liquefied Natural gas and all grades of liquids / chemicals including refrigerated/pressurized liquefied gases. The terminal will comprise of one LNG berth and six off shore berths with about 100 ha. of to be reclaimed for tank farms and other facilities. Necessary receipt and dispatch facilities, tank farm area requisites dredging for navigational area, environmental and safety measures are also planned with the project. The terminal will serve as a buffer between receipt and dispatch, since there is a difference in the rates and timings of receipt of material and the dispatch of the same. The project will be implemented in two phases.

Phase I: One LNG berth and three and three liquid cargo berth and reclamation of 50 Ha. And with requisite tank farms. LNG- 3.00MT & POL 6.0 MT.

Phase II: Three liquid cargo berths and reclamation of 50. Ha. With requisite tank farma POL 6.0

| Operating Agency | Jawaharlal Nehru Port Trust (JNPT) Address: Administration Building, Sheva- Navi Mumbai- 400707 Tel: 091- 9502-7242290; Fax: 091- 9502-7242642 Website: www. jnport.com Contact person: Chief manager, Transportation and Planning. | |
|---|---|--|
| Gestation Period | The first phase of the project will be taken up in 2003-04 and completed in phases over a period of 42 months. | |
| Revenue Through operations of the terminal. Generation | | |
| Status of the Project | . Pre qualification procedure is on for Phase I. | |

Project Benefits

- Proximity to industrially developed hinterland of the Mumbai-Thane-Belapur-Nagothane belt and Konkan region with a demand for liquid Chemicals including Refrigerated Liquefied Gases (RLG) and pressurized Liquefied gases(PLG).
- Availability of a sheltered deep water harbour and approach including modern port and infrastructure facility.
- Existing road and rail facilities which are being upgraded and modernised.
- Ease of connecting to existing ethylene, propylene and other pipelines running close by and provision of pipeline corridor by CIDCO.

- Availability of space for a chemical terminal without any significant impact on the environment, hydrological and geomorphologic aspects and demography of the region.
- > Availability of space for future expansion.
- Availability of skilled and and semi-skilled personnel in the region.

Status of Government Clearances needed for Successful implementation of the project

| No. | List of government clearances needed | Status |
|-----|---|--------------------|
| 1. | Proposal sent to Ministry of shipping for | Approval obtained. |
| | approval | |
| 2. | Proposal sent for clearance from Ministry | Approval obtained |
| | of Environment . | |

Details of the Project

Location

The facilities are planned on the southern side of Bulk terminal of the Port in Uran mudflat area.

Other Details

The Marine chemical terminal shall have two berths (a twin birth) catering to handling RLG/PLG and class A,B C grade liquids/chemicals.

Phase 2 of the project will handle LNG for which the permission has been awaited.

As per the traffic studies conducted by the port, traffic at the terminal is assessed at 6.0 million tonnes per annum for chemicals of class A,B and C grade chemicals, RLG, PLG, and edible oils and 3 million tonnes per annum of LNG.

Break up of Project Cost

| Facilities Planned Rs | . Mn | USD Mn |
|---|---------|--------|
| Twin berth for class A,B and C liquid cargo and RLG/PLG | | |
| Filling of 50 Ha | 1310.0 | 27.0 |
| Containment Bund | 310.0 | 0.6 |
| Soil treatment/paving | 880.0 | 18.0 |
| Development of Tank frame | 2000 | 40.0 |
| Jetty Fixtures | 600.0 | 12.0 |
| Dredging 15 mn cum@ Rs. 150/cum | 2250.0 | 46.0 |
| Two jetties of 300m long and 25 M wide | 468.0 | 10.0 |
| One approach of 2.5 km long and 5m wid | e 338.0 | 7.0 |
| @ Rs. 27,000/Sq.mt. | | |
| Other Infrastructure facilities | 1000.0 | 20.0 |
| Total | 9160.0 | 187.0 |
| For LNG facilities | 19470.0 | 365.0 |
| Supervision ,handling, consultancy etc. | 1370.0 | 29.0 |
| | 30000.0 | 612.0 |

Proposed Implementation Plan

| The project will be implemented on BOT basis through invitation of global tenders. | |
|--|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

CONSTRUCTION OF MINOR PORT AT ALEWADI

The Project: To construct a modern and all weather port at Alewadi in Thane District, Maharashtra. The estimated investment in the project is Rs. 7000.0 Million (USD 140.0 million).

Project Description: Maharashtra has a long coastline which could be effectively developed for carrying out inland water transport for goods and passengers. Maharashtra Maritime Board has identified development of a minor port at Alewadi in Thane District. The proposed port will be located off the coat near Alewadi village south of Ucheli creek. The site is about 70 Km from Mumbai. As per a study carried out by Consulting Engineering Services (CES), the traffic projections are in the region of 10 mtpa and 12 mtpa for the years 2006 and 2011 respectively.

| Operating Agency | Maharashtra Maritime Board. Address: 3 rd Floor, 14, Ramjibhai Ballard Estate, Mumbai-400 001 Tel: 091- 022- 2612143 Fax: 091- 022- 2614331 E mail: ceommb@bom3.vsnl.net.in Contact person: Chief Executive Officer | |
|-----------------------|--|--|
| Gestation Period | The project will be completed in a period of 3 to 5 years. | |
| Revenue Generation | The project is expected to earn revenues by way of port operations. | |
| Status of the Project | Planning stage. | |

Project Benefits

> To facilitate handling of additional cargo at Mumbai and Jawaharlal Nehru Port.

Status of government Clearances needed for successful implementation of the project:

| No. | List of the clearances needed | Status |
|-----|--------------------------------------|--|
| 1. | Environmental clearance | To be obtained by the entrepreneur |
| 2. | Availability of land for the project | Will be provided by GOM on lease by charging a nominal lease rental. |

Location

The proposed port will be located off the coast near Aleawadi village, south of Ucheil creek. The site is about 8 km from Boisar railway station and 25 Km from NH-8. At the site, rock contours are available at 1.5 Km, and 2.0 Km, from shore. Beach material is sandy.

Proposed implementation plan:

The project implementation schedule begins with selection of the agency (Licensee) which will under take construction of facilities on "Build, Own, Operate & Transfer" basis. The licensee will have to complete the survey of the project site, carry out detailed soil & other investigations followed by detailed engineering, selection of agencies to construct the port before commencing construction. Considering the variety & volume of work involved in creation of the Port, it is suggested that total works be divided into several packages for execution as indicated below:

- Breakwater
- Jetties
- Dredging
- Tugs & navigational Aids
- Electrical Facilities
- Roads

CONSTRUCTION OF MINOR PORT AT ANJANVEL

The Project: To construct a modern and all weather port at Anjanvel in Ratnagiri District, Maharashtra. The estimated investment in the project is Rs. 6000.0 Million (USD 120.0 million).

Project Description: Maharashtra has a long coastline which could be effectively developed for carrying out inland water transport for goods and passengers. Maharashtra Maritime Board has identified development of a minor port at Anjanvel in Ratnagiri District. The proposed port will be located on the Southern banks of Vashishthi river tidal estuary meeting the Arabian sea. The port will provide an easy access for Dabhol Power plant. The site is located about 90 km from Mumbai port. Facilities for ship breaking and ship repair/building could be taken up near the port. As per a study carried out by Consulting Engineering Services (CES), the traffic projections are in the region of 7.5 mtpa and 8.5 mtpa for the years 2005 and 2010 respectively.

| Operating Agency | Maharashtra Maritime Board. Address: 3 rd Floor, 14, Ramjibhai, Ballard Estate, Mumbai-400 001 Tel: 091- 022- 2612143 fax: 091- 022- 2614331 E mail: ceommb@bom3.vsnl.net.in Contact person: Chief Executive Officer | |
|-----------------------|---|--|
| Gestation Period | The project will be completed in a period of 3 to 5 years. | |
| Revenue Generation | The project is expected to earn revenues by way of port operations. | |
| Status of the Project | Planning stage. | |

Project Benefits

> To facilitate handling of raw material needed for Dabhol Power Plant.

Status of government Clearances needed for successful implementation of the project:

| No. | List of the clearances needed | Status |
|-----|--------------------------------------|--|
| 1. | Environmental clearance | To be obtained by the entrepreneur |
| 2. | Availability of land for the project | Will be provided by GOM on lease by charging a nominal lease rental. |

Location

The site lies in Ratnagiri district at about 90 Km. from Mumbai. The land mass from the site is hilly an has thick vegetation. At the entrance of the river, there is a sand bar of about 850 m width across the mouth of the river. The depth of 10 m. exists all the way beyond the sand bar further upstream to 5 Km.

Proposed implementation plan:

The project implementation schedule begins with selection of the agency (Licensee) which will under take construction of facilities on "Build, Own, Operate & Transfer" basis. The licensee will have to complete the survey of the project site, carry out detailed soil & other investigations followed by detailed engineering, selection of agencies to construct the port before commencing construction. Considering the variety & volume of work involved in creation of the Port, it is suggested that total works be divided into several packages for execution as indicated below:

- Breakwater
- Jetties
- Dredging
- Tugs & navigational Aids
- Electrical Facilities
- Roads

CONSTRUCTION OF MINOR PORT AT GANESHGULE

The Project: To construct a modern and all weather port at Ganeshgule in Ratnagiri District, Maharashtra. The estimated investment in the project is Rs. 7000.0 Million (US 142.0 million).

Project Description: Maharashtra has a long coastline which could be effectively developed for carrying out inland water transport for goods and passengers. Maharashtra Maritime Board has identified development of a minor port at Ganeshgule in Ratnagiri District. The proposed port will be located on the south of Pawas bay in the Ratnagiri District and it is 20 km. from Ratnagiri. As per a study carried out by Consulting Engineering Services (CES), the traffic projections are in the region of 6.6 mtpa and 8.1 mtpa for the years 2005 and 2010 respectively. Cargo composition will be LNG, Cement and general cargo including containers.

| Operating Agency | Maharashtra Maritime Board. Address: 3 rd Floor, 14, Ramjibhai Ballard Estate, Mumbai-400 001 Tel: 091- 022- 2612143 Fax: 091- 022- 2614331 E mail: ceommb@bom3.vsnl.net.in Contact person: Chief Executive Officer | |
|--------------------------|--|--|
| Gestation Period | The project will be completed in a period of 3 to 5 years. | |
| Revenue Generation | The project is expected to earn revenues by way of port operations. | |
| Status of the Project | Planning stage. | |

Project Benefits

> To facilitate handling of cargo coming to Ratnagiri, mainly ago exports.

Status of government Clearances needed for successful implementation of the project:

| No. | List of the clearances needed | Status |
|-----|--------------------------------------|--|
| 1. | Environmental clearance | To be obtained by the entrepreneur |
| 2. | Availability of land for the project | Will be provided by GOM on lease by charging a nominal lease rental. |

Location

The site lies in Ratnagiri district at about 20 Km. from Ratnagiri. The site is sheltered partially by hilllocks. The beach along Ganeshgule is sandy. Northern and southern shores of the bay are rocky. The 5m and 10 m contours are at a distance of about 0.3 km and 0.9 km. respectively. Bore logs available indicate that at 4 to 5 m below the sea bed, sand exists followed by weathered basalt rock.

Cargo Traffic & Berth Requirements

| Commodity | 2000 AD | | 2005 AD | | 2010 AD | |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Cargo (MTPA) | No of Berths | Cargo (MTPA) | No of Berths | Cargo (MTPA) | No of Berths |
| General Cargo | 1.0 | 2 | 2.0 | 3 | 2.5 | 4 |
| LNG | 4.0 | 1 | 4.0 | 1 | 5.0 | 1 |
| Cement | 0.6 | 1 | 0.6 | 1 | 0.6 | 1 |
| Total | 5.6 | 4 | 6.6 | 5 | 8.1 | 6 |

Proposed implementation plan:

The project implementation schedule begins with selection of the agency (Licensee) which will under take construction of facilities on "Build, Own, Operate & Transfer" basis. The licensee will have to complete the survey of the project site, carry out detailed soil & other investigations followed by detailed engineering, selection of agencies to construct the port before commencing construction. Considering the variety & volume of work involved in creation of the Port, it is suggested that total works be divided into several packages for execution as indicated below:

- Breakwater
- Jetties
- Dredging
- Tugs & navigational Aids
- Electrical Facilities
- Roads

CONSTRUCTION OF MINOR PORT AT VIJAYDURG

The Project: To construct a modern and all weather port at Vijaydurg in Sindhudurg District, Maharashtra. The estimated investment in the project is Rs. 5000.0 Million (USD 100.0 million).

Project Description: Maharashtra has a long coastline which could be effectively developed for carrying out inland water transport for goods and passengers. Maharashtra Maritime Board has identified development of a minor port at Vijaydurg in Sindhudurg District. The proposed port will be located at southern portion of Burmana bay near the mouth of Vagothane River. As per a study carried out by Consulting Engineering Services (CES), the traffic projections are in the region of 2.0 mtpa and 2.5 mtpa for the years 2005 and 2010 respectively. The traffic composition will be of general cargo with or without containers.

| Operating Agency | Maharashtra Maritime Board. Address: 3 rd Floor, 14, Ramjibhai Ballard Estate, Mumbai-400 001 Tel: 091- 022- 2612143 Fax: 091- 022- 2614331 E mail: ceommb@bom3.vsnl.net.in Contact person: Chief Executive Officer |
|--------------------------|--|
| Gestation Period | The project will be completed in a period of 3 to 5 years. |
| Revenue Generation | The project is expected to earn revenues by way of port operations. |
| Status of the Project | Planning stage. |

Project Benefits

> To facilitate inland movement of cargo and passengers.

Status of government Clearances needed for successful implementation of the project:

| No. | List of the clearances needed | Status |
|-----|--------------------------------------|--|
| 1. | Environmental clearance | To be obtained by the entrepreneur |
| 2. | Availability of land for the project | Will be provided by GOM on lease by charging a nominal lease rental. |

Location

The site lies in Sindhudurg district at about 60 Km. from Kokisare Railway station and 55 Km. from NH-17. Presently, there is one jetty (51m* 6.6 m) with maximum permissible draft of 3.0 m. Bore logs available indicate soft clay for a depth of 3 to 6 m below sea bed at proposed harbour basin and channel, which is unerlain by moderate to completely weathered basalt layer and hard rock.

Proposed implementation plan:

The project implementation schedule begins with selection of the agency (Licensee) which will under take construction of facilities on "Build, Own, Operate & Transfer" basis. The licensee will have to complete the survey of the project site, carry out detailed soil & other investigations followed by detailed engineering, selection of agencies to construct the port before commencing construction. Considering the variety & volume of work involved in creation of the Port, it is suggested that total works be divided into several packages for execution as indicated below:

- Breakwater
- Jetties
- Dredging
- Tugs & navigational Aids
- Electrical Facilities
- Roads

DEVELOPMENT OF NEW PORT AT REDI

The Project: To develop a minor port at Redi in Sindhudurg District of Maharashtra. The estimated investment in the project will be Rs. 6000.0 Million (USD 120.0 million).

Project Details:

M/s Usha Ispat Ltd. Have set up a steel plant near Redi in District Sindhudurg of Maharashtra. The plant produces around 5 lac tonnes of pig iron and steel at present. The plant uses substantial quantity of met coke, lime stone, dolomite and quartz as raw materials. The present port at Redi is located at south of Rainy point in the shelter formed by rocky projections. The proposed port will be located at about 20 km from Sawantwadi Railway station and 35 km from NH-17.

The proposed port development envisages construction of approach channel, harbour basin & berth, wave tranquility inside the harbour, adequate stopping distance for largest vessels entering the port for easy maneuverability of vessels & crafts using the port simultaneously. These are the pre – requisites for servicing vessels.

For servicing cargo the developments would be in the areas of adequate number of size of berths, suitable cargo handling equipment, cargo transfer systems from berth to storage areas & vice — versa, adequate storage facilities & efficient hinterland transport linkages. The other developments going to take place are the provision of power & water supply, fire fighting, navigational aids, bunkering facilities, environmental control & protection measures.

| Operating Agency | Maharashtra Maritime Board. Address: 3 rd Floor, 14, Ramjibhai Ballard Estate, Mumbai-400 001 Tel: 091- 022- 2612143 Fax: 091- 022- 2614331 E mail: ceommb@bom3.vsnl.net.in Contact person: Chief Executive Officer | | |
|--|--|--|--|
| Gestation The project will be completed in a period of 3 to 5 years. Period | | | |
| Revenue The project is expected to earn revenues by way of port operation Generation | | | |
| Status of the Project | е | | |

Project Benefits

> Development of additional port facility at Redi will reduce the transportation cost for coal and iron ore which needs to be transported by road from Marmugao port in Goa.

Status of Government Clearances needed for successful implementation of the project :

| No. | List of the clearances needed | Status | |
|-----|-------------------------------|------------------------------------|--|
| 1. | Environmental clearance | To be obtained by the entrepreneur | |

| 2. | Availability of land for the project | Will be provided by GOM on lease | |
|----|--------------------------------------|-------------------------------------|--|
| | | by charging a nominal lease rental. | |

Proposed Implementation Plan

The project implementation schedule begins with selection of the agency (Licensee) that will undertake construction of facilities on Build, Own, Operate & Transfer basis. The Licensee will have to complete the surveys of the projects site, carry out detailed soil & other investigations followed by detailed engineering, selection of agencies to construct the port & thereafter commence construction. Considering the variety & volume of work involved in creation of Redi port, it is suggested that the total works be divided into several packages for execution as indicated below:

- Breakwater
- Berths
- Dredging
- Tugs & Navigational Aids
- Electrical facilities &
- Roads

CONSTRUCTION OF MINOR PORT AT JAIGAD

The Project: To construct a modern and all weather port at Jaigad in Ratnagiri District, Maharashtra. The estimated investment in the project is Rs. Million (USD million).

Project Description: Maharashtra has a long coastline which could be effectively developed for carrying out inland water transport for goods and passengers. Maharashtra Maritime Board has identified development of a few Maritime ports. Existing port at Jaigad is a natural harbour at the mouth of river Shastri in Ratnagiri district. It has two bays viz: Dhamankhol Bay and Jaigad harbour. However, since there is a lack of backup space at the existing port, the Dhamankhol bay has been proposed for the development of the port, as adequate flat land is available. The proposed port is about 35 Km. from Karbude Railway station and about 40 km from NH-17.

| Operating Agency | Maharashtra Maritime Board. Address: 3 rd Floor, 14, Ramjibhai Ballard Estate, Mumbai-400 001 Tel: 091- 022- 2612143 Fax: 091- 022- 2614331 E mail: ceommb@bom3.vsnl.net.in Contact person: Chief Executive Officer |
|---------------------------------------|--|
| Gestation Period | The project will be completed in a period of 3 to 5 years. |
| Revenue Generation | The project is expected to earn revenues by way of port operations. |
| Status of the Planning stage. Project | |

Project Benefits

Facility to handle additional cargo at Jaigad port.

Cargo Traffic & Berth Requirements

As per a study conducted by Consulting Engineering Services(CES), the traffic at Jaigad port is expected to increase to 3.7 million tonne per annum (mtpa) in 2005 and to 4.2 mtpa by 2010. Details of projections of type wise increase in cargo are given in the table below:

| Commodity 2000 A.D 2 | | 2005 A.D | 2005 A.D | | 2010 A.D | |
|----------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|
| | Cargo (MTPA) | No. of Berths | Cargo (MTPA) | No. of Berths | Cargo (MTPA) | No. of Berths |
| Coal | 1.0 | 1 | 1.0 | 1 | 1.0 | 1 |
| Steel Products | 0.7 | 1 | 0.7 | 1 | 0.7 | 1 |
| General Cargo | 1.0 | 3 | 2.0 | 3 | 2.50 | 4 |
| Total | 2.7 | 5 | 3.7 | 5 | 4.2 | 6 |

Status of government Clearances needed for successful implementation of the project:

| No. | List of the clearances needed | Status |
|-----|-------------------------------|------------------------------------|
| 1. | Environmental clearance | To be obtained by the entrepreneur |

| 2. | Availability of land for the project | Will be provided by GOM on lease by charging a nominal lease rental. | |
|----|--------------------------------------|--|--|
| | , | | |

Proposed implementation plan:

The project implementation schedule begins with selection of the agency (Licensee) which will under take construction of facilities on "Build, Own, Operate & Transfer" basis. The licensee will have to complete the survey of the project site, carry out detailed soil & other investigations followed by detailed engineering, selection of agencies to construct the port before commencing construction. Considering the variety & volume of work involved in creation of Jaigad Port, it is suggested that total works be divided into several packages for execution as indicated below:

- Breakwater
- Jetties
- Dredging
- Tugs & navigational Aids
- Electrical Facilities
- Roads

DEVELOPMENT OF TWO OFFSHORE BERTHS AND CONTAINER TERMINALS At MUMBAI PORT TRUST

The Project:

To develop two offshore container berths & Container Terminal on Build, Operate, & Transfer (BOT) basis in Mumbai Harbour. The estimated cost of the project will be Rs. 9580.0 million(USD 195.0 million).

Project Description:

Considering the stagnating bulk traffic at the port, the shift in the pattern of merchandise trade towards containerized cargo, the management of Mumbai Port Trust has decided to develop the port by undertaking the above project. The project takes into consideration the following developments:

- Construction of two new offshore berths for handling majority of container traffic (around 0.82 million TEUs by 2007.)
- Construction of a container stockyard for the new terminal.
- Provide new improved rail/road evacuation facilities for containerized cargo.

As per the traffic forecast Mumbai Port has a potential to increase its container traffic from about 0.3 million TEUs in 2000 – 2001 to about 0.82 TEUs in 2007 – 08 (Short Term) & exceed 1.6 million TEUs in long term 2020 – 2021. The railways are also planning to enhance a crucial link that will allow the port to handle upto 1.6 million TEUs.

Adequate space is available for developing the container stockyard having a maximum of 2900 numbers of ground spots, which would handle an annual throughput of around 1.1 million TEUs.

| Operating Agency | Mumbai Port Trust | | |
|---|--|--|--|
| | Port House, Shoorji Vallabhdas Marg, Ballard Estate, | | |
| | Mumbai – 400 001 | | |
| | Tel No. 2611458 (P) 2614321 (Ext. 2031) | | |
| | Web site: www.mumbaiporttrust.com | | |
| | Contact Person: Shri B.R.Kadam, Chief Engineer | | |
| Gestation Period | The project will be commissioned by 2005. A further development is | | |
| | also envisaged by the year 2007 - 08 when a third berth will be | | |
| | constructed. | | |
| Revenue Generation | Revenue generation will be Rs 1809/- million in 2006, Rs 2185 | | |
| | million in 2007 & Rs 2821 million by 2008 onwards through port | | |
| | operations. | | |
| Status of the Project | RFQ document are being prepared and will be invited by December | | |
| | 2002. | | |
| Investment | In conformity with the current initiatives of the Govt. of India, Mumbai | | |
| Opportunities Port proposes to offer the construction, operation & manage | | | |
| | new offshore container terminal at Mumbai Port to a private sector | | |
| operator through the BOT route. The BOT operator will | | | |
| | the following activities. | | |
| | Construction of berths, stockyard, foundation & buildings. | | |
| | Provide topside facilities. | | |
| | Under take cargo operations | | |
| | All backup / common users facilities & services (including capital & | | |
| | maintenance dredging required for the project is proposed to be | | |
| | managed / developed by Mumbai Port Trust. | | |
| | The estimated total investment by BOT operator is about Rs 7.8 bn | | |
| | (approximate US \$ 160mn) phased over a period of 5 years. | | |

Project Benefits:

- > Concessionaire is free to operate & manage the project.
- > Good growth prospects with possible expansion in traffic.
- Back up facilities & linkages available & being expanded & upgraded.
- Project offers an Financial IRR of 16.6%.
- Addition of third berths will enhance returns to 18.4%.
- An unique opportunity to invest in the Port of Mumbai which is the Prominent Port in India & the region.
- Project is the part of the overall development & modernization plan for the Port of the Mumbai.
- > Adequate capital flow with significant growth potential & scope for expansion.
- > The proposed privatization route will provide full operational independence to the BOT operator.
- ➤ Attractive return potential project IRR is in excess of 16%.

Status of Government Clearances needed for Successful Implementation of the Project:

| No. | List of the Government Clearances needed / already acquired | Status |
|-----|---|---|
| 1. | Location clearance | The location clearance from the Ministry of Environment & Forest, Government of India has already been obtained by Mumbai Port Trust. |
| 2. | Environmental clearance | The operator is not required to obtain any environmental clearances since Mumbai Port Trust will be obtaining the environmental clearances. |

Proposed Implementation Plan:

The Total Cost of the Project is Rs 9,580 Million. The Project will be awarded to the investor on a BOT basis. The Project will be Commissioned by 2005 & the third berth will be constructed by 2007 – 08.