

# **REQUEST FOR QUALIFICATIONS**

**-PORT OF PLOČE-  
CROATIA  
BULK CARGO TERMINAL DESIGN**

**PROCUREMENT OF BULK CARGO HANDLING  
EQUIPMENT AND SYSTEMS**

**June 2011**



**LUKA PLOČE d.d.**

## **Request for Qualifications**

The Port of Ploče, Croatia requests expressions of interest from experienced, bulk material handling contractors for the Design, Supply, Delivery, Erection and Commissioning, on a TURNKEY basis, of material handling equipment for a new dry bulk cargo terminal. The Material Handling System shall be capable of unloading and loading of cargo vessels, and loading of train cars. The intention of this Advertisement is to establish short list of interested and qualified bidders to be invited to participate on the subsequent tender process for the supply of the material handling equipment and systems. Therefore, Port of Ploče requests interested contractors to submit documentation demonstrating their experience and qualifications, according to the terms of this solicitation.

It is anticipated that the tender process that follows this prequalification will consist of one advertisement for proposals (RFP) to provide the required material handling equipment and systems for the entire project. The RFP will allow bidders to propose on one or on more lots of required equipment, at their discretion.

The tender for this project is expected to be launched in the second half of 2011.

## **Instructions to Bidders**

### **Information included in the RFQ package**

- Request for Qualifications
- Instructions to Bidders
- Project Description
- Information Required for Prequalification
- Evaluation Process
- Annexes:
  - A. Project Location Map
  - B. Project Site Map
  - C. Functional Arrangement Drawing
  - D. Forms to Accompany SOQ

### **Statement of Qualifications (SOQ) Response**

Responses to this RFQ shall be in English and include the following:

- ✓ Cover Letter expressing interest in participating in this Procurement, and including signature and full contact information for the firm's designated representative.
- ✓ Completed Forms from Annex D:
  1. CONTRACTOR'S EXPERIENCE LIST AS PRIME CONTRACTOR
  2. PROJECT MANAGER
  3. MECHANICAL ENGINEERING EXPERIENCE
  4. STRUCTURAL ENGINEERING EXPERIENCE
  5. ELECTRICAL ENGINEERING EXPERIENCE
  6. DESIGN AGENCY(IES)
  7. FINANCIAL CAPABILITY
- ✓ Curriculum Vitae for key senior staff positions
- ✓ Company literature and brochures specifically pertaining to this Project as appropriate

### **SOQ Due Date**

Firms responding to this RFQ shall submit their Statements of Qualifications, complete, by no later than **17:00 CET (UTC+1) on 16 August 2011**.

## **SOQ Submittal**

Responses to the RFQ shall include one (1) original and one (1) copy of the printed and bound proposal complete with all attachments, addressed and delivered to:

**Ploče Port Company**  
**Attn.: Ms. Jasminka Vrdoljak**  
**Luka Ploče**  
**Trg kralja Tomislava 21**  
**20340 Ploče, Croatia**

Additionally, Responses to the RFQ shall be submitted electronically as an email transmission with attachments in **PDF** format (compatible with Adobe Acrobat) to:

**Ploče Port Company**  
**Mrs. Jasminka Vrdoljak**  
[jasminka.vrdoljak1@du.t-com.hr](mailto:jasminka.vrdoljak1@du.t-com.hr)

The printed proposal package must arrive at the specified place with date and time stamp no later than the date and time listed above. The Email cover message and attachments should also arrive with date and time stamp no later than the date and time listed above, but the printed copy will be considered the official submittal for purposes of evaluation.

## **Anticipated Evaluation Period**

It is anticipated that responses to this RFQ will be reviewed and evaluated within 6 weeks following the SOQ submittal date listed above. It is further anticipated that responding firms will be notified of their evaluation results by email. Firms determined to be qualified will automatically be sent the forthcoming RFP when it is issued.

## **Project Description**

The Ploče Port Authority (**PPA**) intends to develop a new bulk cargo terminal to handle various dry bulk import and export commodities within the Port of Ploče, Croatia. The Project is required to import metallurgical coal, iron ore, and bauxite for process plants located in Bosnia-Herzegovina. The project shall also import steam coal and petroleum coke that will be re-exported in coastal vessels to power plants along the Adriatic Coast.

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The new terminal will have material handling capacities as follows:

<b>Terminal Characteristic</b>	<b>Capacity (tonnes per year)</b>
Berth- ship unloading	3,800,000
Berth- ship loading	800,000
Berth- total throughput	4,600,000
Train loading	3,000,000
Storage Yard	3,800,000

The terminal will be able to accommodate the following range of vessel sizes:

<b>Vessel Size</b>	<b>DWT (tonnes)</b>	<b>LOA (m)</b>	<b>Beam (m)</b>	<b>Draft (m)</b>	<b>Air Draft (m)</b>
Minimum	14,000	141.3	20.8	8.4	28.7
Maximum	180,000	290.0	45.9	18.0	56.5

The Joint Venture Team of BCEOM, TEC Inc., and Hidroelektra-Projekt (hereinafter referred to as the **JV Team**) was awarded a contract for the preparation of preliminary design and bidding documents for construction of basic infrastructure and for material handling equipment and systems.

The PPA will be responsible for constructing the basic infrastructure required for the Terminal's dry bulk cargo handling system. The basic infrastructure includes:

- 1) Site preparation including dredging of approach channel, consolidation of the storage yard, and internal roadways,
- 2) Construction of the wharf,
- 3) Supply of power to pick up point at switchgear,
- 4) Supply of water to principal connection points, including dust suppression sprays and buildings,
- 5) Foundations including rails and anchor bolts.

A concession to build, own, and operate the bulk cargo handling system has been awarded to The Port of Ploče Company, a joint stock company (hereinafter referred to as the **Concessionaire**). The Concessionaire will be responsible for:

- 1) Final design, procurement, erection, and start-up of the bulk cargo handling system, including:
  - a. Conveyors including all electrical, control, mechanical, and structural components required for operation,
  - b. Ship unloading and ship loading machines,
  - c. Material stacking and reclaiming machines,
  - d. Train loading stations,
- 2) MCCs and distribution of power from switchgear to all equipment,

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- 3) Communication and control systems,
- 4) Distribution of water from principal connection points supplied by PPA to:
  - a. dust suppression sprays on material handling system,
  - b. equipment wash down areas,
  - c. fire protection system,
- 5) Administration, operating and maintenance buildings,
- 6) Equipment and supplies required for operations and maintenance.

The project will be developed in two phases. The first phase will be constructed in the near term.. The second (final) phase of the project and will be constructed when cargo throughputs increase to a level where the additional investment is deemed justified by the Concessionaire.

The terminal will be designed to unload different materials from Handymax to Capesize Vessels, transport those materials to the ground storage and reclaim them to deliver to final destination, railcars or vessels. Materials handled at the port will be: Iron Ore, Coal and Coke.

The complete scope of supply for the project will include:

□ **Two (2) Ship unloaders**

Ship unloaders shall be travelling grab bucket gantry type and shall be of heavy duty design and construction to operate continuously with a high degree of reliability. They shall be sized to unload the project commodities from Handy-Max to Cape Size vessels for which a boom outreach of 38 m is required from the waterside rail.

The ship unloaders shall have a free digging capacity of 2000 tonnes per hour(tph). A cream digging rate of 2400 tph is expected. The ship unloaders shall handle various materials with various densities.

The ship unloaders shall travel along the wharf on rails mounted on the wharf deck. The rail gauge shall be 20m. The ship unloaders shall be able to cover an end-to-end hatch distance of 215 m. The rails shall be further extended to accommodate the length of the crane's wheel assembly.

The ship unloaders shall discharge to 2000 mm wide belt conveyor located adjacent to the landside rail. Connecting conveyors shall be provided by the unloader manufacturer for this purpose.

The ship unloaders shall be equipped to operate under manual control and in a semi-automatic mode initiated and cancelled at the operator's discretion. .

□ **One (1) Ship loader**

The Shiploader shall be capable of full hatch coverage for ships ranging from 2,000 DWT to 35,000 DWT.

The shiploader shall be capable of loading coal into ships at a nominal rate of 1500 tph (peak rate of 1800 tph). The conveyors shall be designed to allow for increased material when the machine is travelling against the feed conveyor. The machine shall be designed for operation at reduced dust emissions.

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The slewing, luffing and travelling motions shall be operable both individually and simultaneously.

The shiploader shall travel along the wharf on rails mounted on the wharf deck. The rail gauge shall be 20m.

□ **One (1) Stacker**

The Stacker shall operate at a nominal rate of 4000 tph (4800 tph peak) at a minimum density of 750 kg/m<sup>3</sup>. The design rate of the Stacker shall allow for increased material flow rate when the machine is travelling against the feed conveyor. The machine shall be designed for operation at reduced dust emissions. The slewing, luffing and travelling motions shall be operable both individually and simultaneously.

The Stacker shall normally be operated unmanned from a remote location. However, it shall also be possible to operate the machine from an operator's cab that provides adequate visibility to the stockpile area.

□ **One (1) Bucket Wheel Reclaimer**

The Bucket wheel Reclaimer shall be capable of excavating the stockpiles in a block reclaim pattern with step lengths of a minimum of 15m and in three benches. The reclaimer nominal rate shall be 1600 tph for coal and 2000 tph for iron ore (peak rate of 2000 tph for coal and 2400 tph for iron ore). The machine shall be designed for operation at reduced dust emissions. The slewing, luffing and travelling motions shall be operable both individually and simultaneously.

The Reclaimer shall normally be operated unmanned from a remote location. However, it shall also be possible to operate the machine from an operator's cab that provides adequate visibility to the stockpile area.

□ **One (1) Train Loading Station**

The train loading system shall be a computer controlled, automatic batch weighing process capable of static accuracies of  $\pm 0.05\%$  or better at a rate of up to 2,400 tph.

The system shall be able to operate in automatic (computer controlled batching) mode, semi-automatic and manual modes.

A digital weight indicator shall be provided. Report generation software shall be provided that will print car data (ID, tare weight, target weight, etc.) and batch information in real time.

Weigh bin charging gates and discharge gates shall be of non-dusting design. The traversing/telescopic chute shall be non-dusting design and shall provide a means for the air to escape during initial weigh bin discharge.

□ **Belt conveyor and Integrated Control Systems**

Dock conveyor receives material from the two traveling grab bucket ship unloaders and feeds cross conveyor. It is constructed completely on elevated trusses with walkways on each side. Wind screens shall be provided to limit wind-blown dust.

Cross conveyor begins at deck level on the dock and rises to Transfer Station to feed Yard conveyor. It is supported on trusses with walkways on each side. Hood covers shall be provided to limit wind-blown dust. It shall also be equipped with a scale of high accuracy to

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monitor the material received from the unloaders. This conveyor shall also incorporate a primary sampler, first divider, reject return to the conveyor.

Yard conveyor 1 receives material from both Cross conveyor and bucket wheel reclaimer. Material received from Cross conveyor is fed to yard stacker via a travelling tripper attached to the stacker. Material received from bucket wheel reclaimer is fed to Train loading conveyor.

Yard conveyor 2 serves as a secondary means to reclaim material when the position of stacker prevents the bucket wheel reclaimer from reaching the material required for loading trains. Three mobile travelling hoppers, mounted on rails and fed by three front-end-loaders are required to regulate flow of material on the belt at the conveyor design capacity. Yard conveyor 2 will feed Train loading conveyor Transfer Station. Its use will be discontinued in Phase 2.

Train loading conveyor begins below grade in a concrete pit and elevates the material to be discharged into train loading station. Elevated portions of the conveyor shall be supported on trusses with walkways on each side. Hood covers shall be provided to limit wind-blown dust. .

Shiploading conveyor will feed the shiploader. Three mobile travelling hoppers, mounted on rails and fed by three front-end-loaders shall be provided. Belt feeders below the hoppers will regulate flow of material on the belt at the conveyor design capacity. The elevated portion shall be supported on trusses with walkways on each side and will be fitted with hood covers to limit wind-blown dust emissions.

**Expected Conveyor Characteristics, Phase 1**

Description	Peak Capacity (tph)	Approximate Length (m)	Approximate Lift (m)	Belt Width(m)	Installed Power (kW)
Dock Conveyor	4,800	328	0	2.00	250
Cross Conveyor	4,800	88	9	2.00	250
Yard Conveyor 1	4,800	633	17	2.00	2X350
Yard Conveyor 2	2,000 coal 2,400 ores	300	11	1.40	200
Train Loading Conveyor	2,000 coal 2,400 ores	195	27	1.40	300
Ship Loading Conveyor	1,800	580	17	1.40	250

**Information Required for Prequalification**

This Section contains criteria that the JV Team and Concessionaire will use to prequalify Bidders. To demonstrate its capabilities and develop its Statement of Qualifications, each company interested in bidding shall provide all the information requested in the forms provided in the Annex. This information will include the following criteria:

**A. GENERAL**

The prime contractor and all subcontractors for major components must have experience and competency in designing, manufacturing, testing and commissioning the bulk handling-transloading facility. Company shall describe:

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1. Organization experience: Minimum of 20 years' experience in the execution and completion of similar projects
2. Clients references and contacts for 2 comparable projects completed within past 8 years
3. Description of manufacturing and fabricating facilities to be used, including locations
4. Company Organizational block diagram (fabrication, manufacturing, major vendors, assembly, transport, etc.) proposed for this project to explain their approach.

#### B. EXPERIENCE

The Company must document specific prior experience to plan, design, fabricate, deliver, erect and commission major cargo handling equipment and systems during recent years:

1. Complete, integrated material handling systems and the referenced products within the past 10 years
2. Ship unloaders - Having completed minimum of 3 Unloaders during the past 5 years
3. Ship loaders - Having completed minimum of 3 Shiploaders during the past 5 years
4. Stackers - Having completed minimum of 3 Stackers during the past 5 years
5. Bucket wheel reclaimer - Having completed minimum of 3 Bucket Wheel Reclaimers during the past 5 years
6. Train Load-out Station(s) - Having completed minimum of 2 Train-Load out stations during the past 5 years

#### C. CAPACITY

The Company's proposed staff to carry out this assignment must demonstrate suitable capabilities to perform this project:

1. Project Manager – Minimum 20 years' experience in related projects
2. Designers - Minimum 10 years' experience in related projects
3. Construction Manager(s) - Minimum 15 years' experience in related projects
4. QA QC Managers - Minimum 10 years' experience in related projects
5. Project Controls Manager (schedule, budget, reporting) - Minimum 15 years' experience in related projects

#### D. KEY PERSONNEL AND ORGANIZATION

The Company shall provide:

1. CVs for key personnel using World Bank format or equivalent
2. Project Organization Chart showing hierarchy and responsibilities

#### E. FINANCIAL CAPACITY

Demonstrate that the Company has the financial capacity to undertake this assignment by providing:

1. Most recent audit report
2. Minimum annual turnover in past 3 years of EUR80 million
3. Minimum cash flow of EUR10 million
4. Description of any lawsuits either current or pending against you company
5. Current bonding capacity and how much is already committed to other projects
6. Total number and combined value of other projects currently under contract

#### F. SAFETY RECORD

Demonstrate Company's commitment to safety:

1. Describe Company Safety Program

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2. Provide statistics for Company accident record and lost work time experience for all locations in which the Company operated over the last 3 years
3. Describe any environmental violation citation charged against the Company for all locations in which the Company operated over the last 3 years

Interested firms are requested to provide sufficient information to demonstrate their experience, technical capabilities and financial suitability to supply the cargo handling equipment and systems required for this project.

### **Evaluation Process**

The Employer and JV Team will independently review the responses from interested companies and rate each according to factors “A” through “F” above. The evaluation process will consider the completeness of and the technical information provided in each SOQ, and each company submitting an SOQ will be rated as qualified or not qualified. Only the qualified firms will be invited to participate in the following tender process for this Project.

*End of RFQ Document*

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**Annexes**

- A. Project Location Map
- B. Project Site Map
- C. Functional Arrangement Drawing
- D. Forms to Accompany SOQ

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**Annex A Project Location Map Port of Ploče, Croatia**



PORT OF PLOČE - CROATIA  
LONGITUDE 17.43 E  
LATITUDE 43.04 N

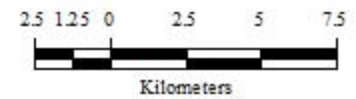


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## **Annex B Project Site Map**

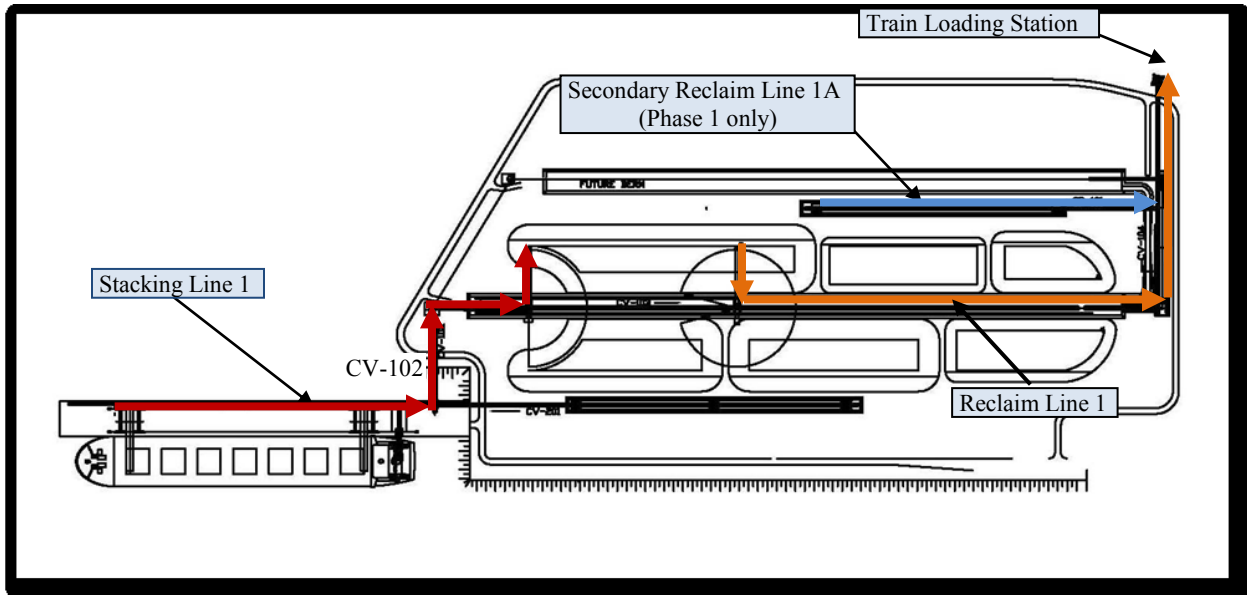


PORT OF PLOČE - CROATIA  
LONGITUDE 17.43 E  
LATITUDE 43.04 N

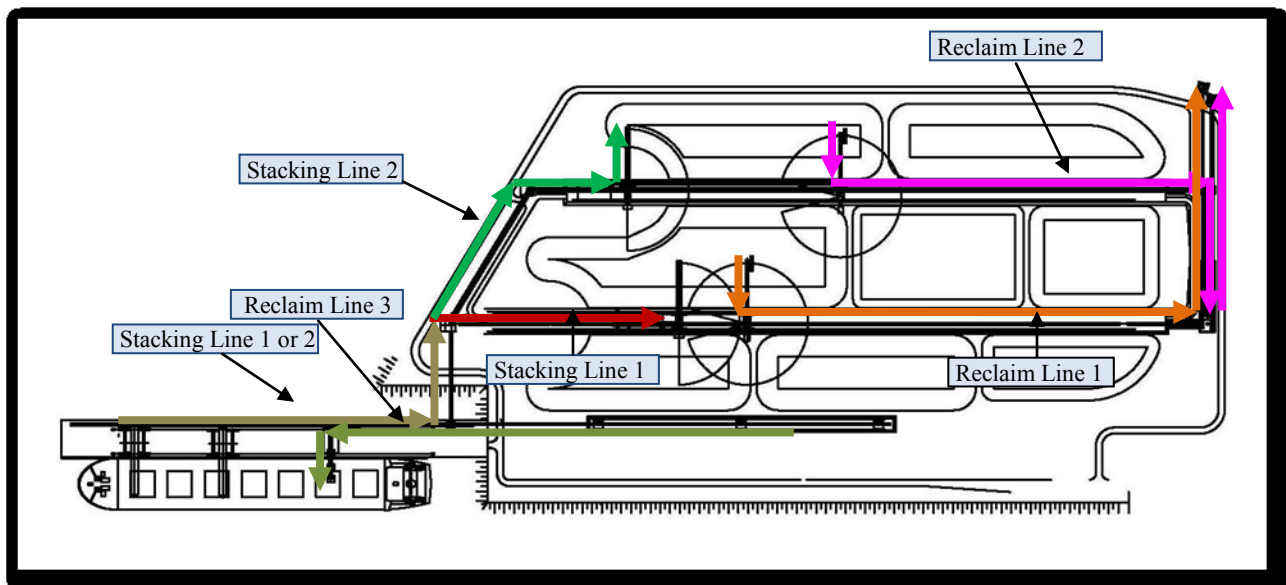


## Annex C Functional Arrangement Drawing

### Phase 1 Arrangement



### Phases 1 & 2 Arrangement



## **Annex D Forms to Accompany SOQ**

- 1. CONTRACTOR'S EXPERIENCE LIST AS PRIME CONTRACTOR**
- 2. PROJECT MANAGER**
- 3. MECHANICAL ENGINEERING EXPERIENCE**
- 4. STRUCTURAL ENGINEERING EXPERIENCE**
- 5. ELECTRICAL ENGINEERING EXPERIENCE**
- 6. DESIGN AGENCY(IES)**
- 7. FINANCIAL CAPABILITY**



**2. PROJECT MANAGER**

Manager's Name: \_\_\_\_\_ (Attach Resume of Project Manager)

Travelling: Shiploader(s); Ship Unloader(s); Stacker/Reclaimer(s), Train Loading Station(s) and turnkey projects managed as Project Manager. Location information must include at least city, state or region, and country.

Location of Operating Traveling: Shiploader(s), Ship Unloader(s), Stacker/Reclaimer(s)	Year Accepted	Structure Fabricator	Machinery Fabricator	Complete Machine Assembly Location

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) projects managed as Project Manager: \_\_\_\_\_

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) projects managed as Project Manager globally: \_\_\_\_\_

**3. MECHANICAL ENGINEERING EXPERIENCE**

Engineer's Name: \_\_\_\_\_ (Attach resume of responsible Mechanical Engineer)

Traveling: Shiploader(s); Ship Unloader(s); Stacker/Reclaimer(s), train loading station(s) design responsible for as Principal Mechanical Engineer. Location must include at least city, state or region, and country.

Owner and Location of Operating Traveling: Shiploader, Ship Unloader, Stacker/Reclaimer	Year Accepted	Type	Capacity (tonnes/hour)	Power Source

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) projects designed by above-named Engineer which were built and accepted: \_\_\_\_\_

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) projects designed by above-named Engineer which were built and accepted globally: \_\_\_\_\_

**4. STRUCTURAL ENGINEERING EXPERIENCE**

Engineer's Name: \_\_\_\_\_ (Attach resume of responsible Structural Engineer)

Traveling: Shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) designs responsible for as Principal Structural Engineer. Location must include at least city, state or region, and country.

Owner and Location of Operating Traveling: Shiploader, Ship Unloader, Stacker/Reclaimer	Year Accepted	Outreach	Design Standard	Welding Standard	Modeling Technique

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) projects designed by above named Engineer which were built and accepted: \_\_\_\_\_

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) projects designed by above named Engineer which were built and accepted globally: \_\_\_\_\_

**5. ELECTRICAL ENGINEERING EXPERIENCE**

Responsible's Name: \_\_\_\_\_ (Attach resume of responsible Electrical Engineer)

Traveling: Shiploader(s); ship unloader(s); stacker/reclaimer(s), train loading station(s) designs responsible for as Principal Electrical Engineer. Location to include at least city, state or region, and country.

Owner and Location of Operating Traveling: Shiploader Ship Unloader, Stacker/Reclaimer	Year Accepted	Connected Power	Conveyor Power	Conversion Type	Control Type	Power Supply

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s) , train loading station(s) projects designed by above named Engineer which were built and accepted: \_\_\_\_\_

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s) , train loading station(s) projects designed by above named Engineer which were built and accepted globally: \_\_\_\_\_

Annex D Forms to Accompany SOQ

**6. DESIGN AGENCY(IES):**

Name of Lead Design Agency \_\_\_\_\_

Lead Agency Location \_\_\_\_\_

Lead Agency Design Responsibilities \_\_\_\_\_

Sub-Agencies \_\_\_\_\_

Location of Each Sub-Agency \_\_\_\_\_

Design Responsibilities of Each Sub-Agency \_\_\_\_\_

Attach experience list for each Agency listed above. List traveling shiploader, ship unloader, stacker/reclaimer projects designed by Lead Agency and Sub-Agencies, use additional pages if necessary. Location must include at least city, state or region, and country.

Agency or Sub-Agency	Owner and Location of Operating Traveling: Shiploader, Ship Unloader, Stacker/ Reclaimer	Year Accepted	Type	Structure Fabricator	Machinery Fabricator	Complete Machine

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), , train loading station(s) projects designed by Lead Agency: \_\_\_\_\_

Total number of traveling: shiploader(s); ship unloader(s); stacker/reclaimer(s), , train loading station(s) projects designed by Lead Agency globally: \_\_\_\_\_

