

REPETITIVE CALL OF TENDER FOR

THE CREATION OF REPAIR PROCEDURES FOR

THREE (3) SHIP TO SHORE PANAMAX (STS) CRANES

WITHIN THE FRAMEWORK OF MANDATORY

ENHANCEMENT ME08 “STUDIES”

Piraeus, Greece

February 2023

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1. IN GENERAL

Scope of Tender

The scope of this tender is for the provision of services for creation of analytical repair procedures for three (3) STS Panamax cranes of PPA S.A. through re-design, calculation and simulation studies using FEA of the problematic areas for the cranes to be able to be repaired and to resume an effective working condition.

Delivery Time

A maximum delivery time from the signing of the relevant contract shall be eight (8) calendar months.

Brief description

The Container Terminal at Pier I of Piraeus Port Authority S.A (PPA S.A.) is situated in the Neo Ikonio region of Piraeus, Greece and has been in operation since 2010. The terminal itself is equipped with five (5) Super Post Panamax Ship to Shore quay cranes, three (3) Panamax Ship to Shore (STS) quay cranes, eight (8) Rail Mounted Gantry (RMG) cranes and other auxiliary container loading/unloading and transformational equipment.

During the operation of the Terminal, the STS Panamax cranes have shown signs of damage and malfunction to their metallic structures and sub-assemblies.

In 2017, PPA S.A. assigned a contract for technical studies on the three (3) STS Panamax Cranes consisting of:

- Structural, mechanical and electrical inspection of the cranes.
- Non-Destructive Testing methods (NDT) to areas of cranes with high stresses.
- Visual and dimensional inspections.
- Structural calculations in accordance with FEM 1.001 using the existing as-built drawings and part lists (The calculations were performed by Finite Element Analysis (FEA) using rod/beam model and components with critical points obtained from the rod/beam model which were analyzed in detail by FEA using shell and solid model).

The specific studies evaluated the following mechanical factors:

- Proof of stress against yield stress,
- Proof of fatigue,
- Proof of stability against overturning,
- Proof of connection details.

With the above results, a list of reinforcement and renovation works was created for the rectification of the specific items.

Taking the above into account and through this tender procedure, PPA S.A. requests from experienced and reputable companies to submit an offer for the ‘creation of repair procedures’ in order to return the cranes to a good working condition.

2. TENDER PROCEDURE

Tender Procedure

Following a written application / request within twenty (20) calendar days from the publication date of the tender and after requesting and submitting to PPA SA a non-disclosure agreement (NDA), the interested candidates will receive the following analytical technical information:

- Technical studies (structural inspection on all cranes, NDT to areas of cranes with high stress, dimensional inspection, structural calculation) on the three (3) STS Panamax Cranes that Piraeus Port Authority S.A has recently performed.
- The mechanical as built drawings of the entire crane (including parts and sub-assembly) in pdf format.
- Bill of material for each parts and sub-assembly of the crane.
- Scope of Works - list of the sub-assembly that required to be repaired.

All Candidates are requested to read very carefully the technical information's and should have an onsite to visit the cranes to gain knowledge of the project.

IMPORTANT NOTE: FEA models are not available in CAE format.

Time limits for receiving additional information – clarifications

Interested candidates may receive additional information or clarifications concerning the present Tender, by submitting questions up to **3 days (included)** before the expiry of the time limit for the submission of offers in writing to PPA Procurement Department by e-mail to: cranestudiestender@olp.gr and procurement@olp.gr

After the lapse of the above time limit, no other communication or request for clarification as to any terms may be acceptable.

Written responses by PPA S.A. are notified to all interested parties until two (2) working days before the expiry of the time limit for the submission of offers.

The time limit for the submission of offers is until **13th March 2023** until **15:00** Greek time (GMT +2).

Confidentiality – Personal Data Protection

During this tender procedure, PPA undertakes to keep confidential all data and information of candidates that comes to PPA's knowledge. PPA has taken the appropriate measures and applies the necessary procedures regarding confidentiality and Personal Data Protection, in compliance with the relevant laws and in particular with the provisions of the Greek Law No 4624/2019 implementing the General Data Protection Regulation (EU) 2016/679 and the Directive (EU) 2016/680 of the European Parliament.

3. OFFER DOCUMENTATION – SUBMISSION OF OFFERS

Offer Documentation

Participants shall submit three (3) sealed sub folders; Participation Supporting Documents, Technical proposal and Financial Proposal of which should all be incorporated and submitted in one main **sealed folder of offer**.

On the main sealed folder of the offer, the following should be clearly written:

- The word «OFFER»,
- The title of the Call of Tender,
- The date of submission of the offer,
- The details of the candidate.

On each one of the three sealed sub-folders depending on the stage of the tender, the following titles must be clearly written:

- «PARTICIPATION SUPPORTING DOCUMENTS» and «TECHNICAL PROPOSAL» and
- «FINANCIAL PROPOSAL».

Submission of offers

Offers should be submitted to PPA's Central Protocol system **in the English or Greek language or officially translated to the English or Greek language**, in-person by the Candidate himself or by the Candidate's Authorized Representative in either electronic or hard-copy form.

All electronic offers should be submitted via email to: offersubmission@olp.gr or to PPA headquarters at Akti Miaouli 10, Piraeus, 1st floor, office number 209.

Note: Each individual sub-folder should be password protected in of which PPA will request the relevant password/s to open the files on the day of the evaluation.

Validity of offers

Offers are valid and binding upon the candidates **for four calendar (4) months** from the submission deadline. Any offer which sets forth a term of validity less than the above mentioned shall be rejected.

Participants are advised that they may be requested to extend the validity of their proposals by a **further two (2) months**.

It is at PPA's sole discretion to consider all proposals as void and invalid and cancel the whole bidding process. No compensation will be paid to the bidders under this circumstance.

Reasons for rejecting an offer may include (but are not limited to):

- If any information provided by the participant is found to be incorrect.
- If a participant fails to verify any information provided in the proposal in response to PPA's request.
- If minimum requirements are not met.

4. SUB-FOLDER OF PARTICIPATION SUPPORTING DOCUMENTS (ON/OFF CRITERIA)

Technical Adequacy Criteria (ON/OFF criteria)

Candidate/s participating in this Call of Tender should clearly submit the following listed information:

- 4.1** A presentation of the candidate/s means of business (Business profile).
- 4.2** Details of previous relative repair projects (design or repair of container cranes using Finite Element Analysis) of the candidate/s completed in the past five (5) years. (Scope, description, results, date, country, etc.) accompanied if where applicable by acceptance reports from the project owner or by a Third-Party company.
- 4.3** CV's of the personnel who will be involved in the project. The formation and personnel required should have at least five (5) years' experience and in:
 - a) Project management of similar metallic construction design-related projects,
 - b) Use of CAD and FEA software programs for metallic designs and constructions.
- 4.4** The nomination of at least one (1) certified International Welding Engineer (IWE) who will be responsible to inspect – reviewing and approving all drawings related to welding and will have the obligation to write the WPS.
- 4.5** A solemn declaration stating that the Candidate gain knowledge of the project.
- 4.6** The candidate/s registration certificate (or equivalent) in force issued by the candidate/s business registry.
- 4.7** The candidate/s competent management body's decision to participate in the Tender, submit the offer and appointing its authorized representative to specifically sign and submit the offer; the authorized representative must have delegated powers to answer on behalf of the candidate/s to any questions PPA may have, and to sign the agreement (In cases of Individual Enterprises).
- 4.8** A binding declaration of the candidate/s:

- a. stating that it is fully aware of the contents of this call and unconditionally and unreservedly accepts its terms;
- b. acknowledging that its participation in the process takes place at its sole risk and expense and that the participation as such does not establish any right to compensation from PPA or PPA's personnel;
- c. acknowledging that disqualification from the Tender or failure to succeed in the Tender does not create any right to compensation for the candidates;

4.9 Full contact details for the candidate/s' authorized representative (including full name, address, phone and fax numbers and email address);

4.10 A binding declaration of the candidate/s:

1. It must not be in a state of bankruptcy, liquidation or compulsory receivership and proceedings to have it declared in a state of bankruptcy, liquidation or compulsory receivership must not have been launched.
2. The managing partners in the case of a limited or general partnership or limited liability company, and the Chairman and Managing Director in the case of a Société Anonyme or the natural persons exercising management functions in all other cases must not have been convicted on the basis of a final judgement for:
 - a. participation in a criminal organization, as defined in Article 2 of Council Framework Decision 2008/841/JHA;
 - b. corruption, as defined in Article 3 of the Convention on the fight against corruption involving officials of the European Communities or officials of Member States of the European Union and Article 2 of Council Framework Decision 2003/568/JHA as well as corruption as defined in the national law of the contracting authority or the economic operator;
 - c. fraud within the meaning of Article 1 of the Convention on the protection of the European Communities' financial interests;
 - d. terrorist offences or offences linked to terrorist activities, as defined in Articles 1 and 3 of Council Framework Decision 2002/475/JHA respectively, or inciting or aiding or abetting or attempting to commit an offence, as referred to in Article 4 of that Framework Decision;
 - e. money laundering or terrorist financing, as defined in Article 1 of

- Directive 2005/60/EC of the European Parliament and of the Council;
f. child labour and other forms of trafficking in human beings as defined in Article 2 of Directive 2011/36/EU of the European Parliament and of the Council.

In addition to the above, for below cases g-l, candidates may provide their declaration in accordance with applicable Greek law (in the case of a Greek or foreigner candidate engaged in activity in Greece) or in accordance with the law of the country of establishment.

- g. embezzlement (Article 375 of the Hellenic Penal Code)
- h. fraud (Articles 386-388 of the Hellenic Civil Code)
- i. Extortion (Article 385 of the Hellenic Penal Code).
- j. Forgery (Articles 216-218 of the Hellenic Penal Code).
- k. Perjury (Article 224 of the Hellenic Penal Code).
- l. Bribery (Articles 235-237 of the Hellenic Penal Code).
- j. That they have fulfilled obligations relating to the payment of social security contributions.
- k. That they have fulfilled obligations relating to the payment of taxes

Note:

To submit (not under the penalty of exclusion) an ISO 9001:2015 certification related to either construction-manufacturing and or mechanical design and studies equipment / machinery.

5. SUB-FOLDER OF TECHNICAL PROPOSAL

Within the technical offer the following should be adequately and appropriately addressed with analytical detail of the proposed provided services:

- 1) The review and evaluation of the results of the identified problematic areas through studies using relevant Computer Aided Engineering programs (CAE).
- 2) The re-design of the identified problematic areas of the cranes according to the latest versions of FEM 1.001 and DIN 15018 through static, dynamic and fatigue studies.
- 3) Creating an updated model of the entire crane including the newly designed parts through a relevant CAE program in order to certify the correctness of the parts through the running of static, dynamic and fatigue studies.
- 4) Calculation of the remaining life cycles of the cranes.
- 5) Creation of repair procedures for the newly proposed repair parts and areas of the QC's frames that required further strengthening which will include:
 - ✓ Detailed construction drawings (parts and assemblies). For sheet metal parts the flat pattern (unfolding) will also be given. All CAD files (2D & 3D) will be delivered to PPA. S.A in electronic format & printed form.
 - ✓ New calculations studies - simulation (static, dynamic, fatigue) with the approval of the Third-Party Inspection Company (All FEA files will be delivered to PPA S.A. in electronic format & printed form).
 - ✓ Written installation and fitting procedures.
 - ✓ Maintenance instructions including structural inspection procedures.
 - ✓ Welding requirements and Welding Procedure Specifications.
 - ✓ Non-Destructive Testing requirements.
 - ✓ Surface treatment requirements.
 - ✓ Painting removal and application requirements.
 - ✓ Dimensional / visual inspection requirements and testing procedures.
 - ✓ Quality assurance and quality control plans.
 - ✓ Safety requirements.
 - ✓ Submission of a final technical folder containing the above mentioned in accordance with Greek and or European Legislation.

Candidates are allowed for the model of Finite Element Analysis (FEA) to proceed with a mixed mesh as follows:

For the gantry drive system landside (LS) and waterside (WS), Sill be Crossbeam LS & W am WS & LS, Leg WS & LS, Portal beam left and right side a beam model should be set up.

For the Bridge girder, Boom, A-frame, Backstay, Crossbeam LS & WS, Pylon LS & WS, Forestay and Trolley a shell model and / or solid model should be set up.

Finally, the candidate should also submit his/her proposed delivery schedule (Stated in calendar weeks incorporated into a Gantt chart or equivalent).

The Technical Proposal should include an analytical description of the offered services in order to sufficiently demonstrate the candidates' understanding of PPA's specific requirements according to this tender.

Third-Party Inspection Company and approval procedure

Upon assignment of the works to the winning bidder, PPA S.A. shall also assign the supervision and approval process to a certified Third-Party inspection and certification company.

The winning bidder will provide all relevant access and details to the certified Third-Party inspection and certification company in order to receive the relative approval for the said works.

In case the certified Third-Party inspection and certification company provides remarks or requests further information to certify the results of the studies, the winning bidder of this tender will comply with and provide the requested information in due time without any extra cost or charge.

6. SUB-FOLDER OF FINANCIAL PROPOSAL

Participants are requested to submit a financial proposal as shown in Annex D.

Terms and conditions

- All prices should be stated in euros excluding VAT.
- No invoices should be issued without prior written acceptance from PPA SA.
- All costs regarding specific software or the design and studies shall be fully borne by the candidate.
- All costs regarding Visa application, travelling and lodging cost in Greece for all Supplier's personnel, if applicable shall be fully borne by the candidate.

7. TENDER AWARD

The evaluation committee appointed by PPA shall evaluate the proposals on the basis of their responsiveness to the requirements set by this call, applying the evaluation criteria as follows:

Evaluation of Technical Proposal/ Technical Score:

- (i) Technical specifications of design and studies: up to 70 points
- (ii) Delivery time of design and studies: up to 30 points

Technical Score (St) = 100 Total Maximum Points

The formula for determining **the Financial Score (Sf)** shall apply as follows:

Sf = 100 X FM/F

Where:

- Sf is the financial score;
- FM is the lowest priced Financial Proposal and
- F is the price of the proposal under consideration.

Proposals will be ranked according to their **combined technical (St) and financial (Sf) scores** using the weights:

Where:

- T = the weight of 70% given to the Technical Proposal;
- P = the weight of 30% given to the Financial Proposal; and

The combined technical and financial score, S, is calculated as follows: -

S = St x T (%) + Sf x P (%)

The Candidate achieving the highest combined technical and financial score (S) will be ranked first and will be the Temporary winning bidder. In the event of an absolute tie, the Candidate with the highest Sf score will be ranked first and will be the Temporary winning bidder.

8. EVALUATION CRITERIA

Evaluation criteria as set below will be used for all submitted offers in accordance with Article 9 of this Call:

Item	Evaluation Criteria	Scoring range (Points system)	Total
Business profile	Range of activities, the size and structure of the company and the years in business of the company.	Maximum 10 points	70 points
Experience	Previous similar or relative projects.	Maximum 20 points	
Personnel	Experience based on the requirements of the Call.	Maximum 10 points	
Technical Proposal	Understanding of the Call and analytical technical proposal of scope of work (Process, methodology and organization).	Maximum 10 points	
Certifications	Certification of the Candidate for ISO 9001, users' certifications for CAD/CAE programs	Maximum 20 points	
Delivery time (Stated in months)	Lowest possible delivery time based on the requirements of the Call.	<ul style="list-style-type: none"> ➤ 10 points for 8 months ➤ 20 points for 7 months ➤ 30 points for 6 months 	30 points

9. PAYMENT TERMS

Payment Terms

The proposed payment terms are as following:

- 30% of the contract amount as advanced payment payable within 15 working days after signing of the contract and after receiving of;
 - A good performance guarantee of 10% of the amount of the contract without vat upon signing of the agreement which will be valid until two months after the acceptance of the studies delivered by PPA (i.e. 10 months. if the acceptance is carried out after the ten-month period, the good performance guarantee must be extended).
 - An advanced payment guarantee of 20% of the amount of the contract without vat upon signing of the agreement valid until final payment.
- 70% after the final approval from the certified Third-Party certification and inspection company and after receipt of all documentation requested in this call.

Good Performance Guarantee

The good performance guarantee will be issued by a financial institution in favour of PPA for an amount equal to 10% of the total amount of the contract without vat valid until two (2) months after the acceptance of the delivered studies.

Advance Payment Guarantee

The Advanced Payment Guarantee will be issued by a financial institution in favour of PPA for an amount equal to 20% of the total amount of the contract without vat valid until two (2) months *after the acceptance of the delivered studies.*

10. GENERAL TERMS

1. This Tender is expressly not a Contract between PPA and the Participant, or an offer to Contract.
2. PPA is not bound to accept the lowest or any Proposal.
3. Nothing in this tender, any Proposal, or any conduct or statement made before or after the issue of this tender is to be construed so as to create legitimate expectations or give rise to any contractual obligations, express or implied, or any obligations in equity. PPA makes no binding representations or undertakings as to how the Proposal process will be conducted.
4. PPA reserves the right to postpone, adjourn or cancel the Tender, as well as to amend the timetable of the Tender and of the Tender in general, at any time, or to repeat the Tender, at its sole discretion, without bearing any liability towards the Participants in the Tender or/ and any third parties. Participation in the Tender remains at the Participant's sole responsibility and expense. The Participant does not derive any compensation rights from this participation other than those set out in the present document. Participation itself in the Tender Procedure equals to Participant's full and unconditional acceptance of the Tender terms and conditions.
5. PPA reserves the right to make any amendment in connection with the present Tender. All amendments shall be communicated in writing to all Bidders. Possible supplementary offers meeting the requirements of these amendments shall be submitted signed by the party signing the initial Offer and shall comprise an integral part of the initial offer.
6. PPA reserves the right to enter into competitive negotiations with all successful Participants after the Evaluation process and before concluding the Contract.
7. The Contract will be governed by and construed in accordance with the Laws of Greece. Disputes, if any, arising out of the performance of the Contract will fall within the jurisdiction of the Courts of Piraeus.
8. The Contract and all written communication between the parties will be in the English language.
9. All applicable regulations and standards (Greek, European Union) should be complied with.

10. GENERAL TERMS

10. Confidentiality: The parties shall keep the terms of the Tender or/and the Contract strictly confidential and shall not disclose such terms to third parties, except it may be required by Law.

11. If a Participant is found to have made false or misleading claims or statements, PPA reserves the right to reject at any time, any Proposal submitted by or on behalf of that Participant. Participants should be aware that giving false or misleading information is a serious offence under the Criminal Code.

12. The Participants are prohibited to form alliances or exchanging information in the tender process, so as to damage the interest of PPA and also exclude the participation of other bidders.

ANNEX A: TECHNICAL STANDARDS

Candidates should follow the below technical standards and methodologies:

- 2D drawings:
 - ✓ In accordance with ISO Standards.
 - ✓ For machining parts dimensions without tolerances values should be in accordance with ISO 2768, for welded parts tolerances should be in accordance with ISO 13920. The Candidate will have to specify the class of tolerances.
 - ✓ Welding symbols in accordance with ISO 2553.
 - ✓ For welding following information must appear on drawings:
 - ❖ Principle of metal structures construction and welding according to FEM 1.001 3rd Edition – booklet 3 and/or EN 1090-2.
 - ❖ Execution of welds in accordance with ISO 5817 quality level B.
 - ✓ Non-Destructive Testing requirements will be clearly specified on the drawings.
 - ✓ For sheet metal parts the unfold (flat pattern) will be given with the required preparation for welding (if applicable).
- For the newly proposed parts and assemblies, the raw material will be in accordance with EN and/or DIN-ISO standards EN 10025-2 (and to be compatible with the existent materials).
- Welding in accordance with FEM 1.001 and DIN 15018.
- Computer Aided Design (CAD) software admissible to perform the 2D and 3D design for the creation of newly proposed parts and assemblies are but not limited to: Solidworks, Inventor, CATIA, Creo, NX Cad, SolidEdge etc.
- Computer Aided Engineer (CAE) software admissible to perform models for Finite Element Analysis for the new proposed parts and assemblies and for all the STS Crane are but not limited to: Solidworks, Inventor, Ansys, MSC Nastran – Patran, FEMAP, NX FEA etc.

ANNEX B: FINANCIAL PROPOSAL SUBMISSION FORMS

_____ [Date]

To:

[Name and address of PPA]

Ladies/Gentlemen:

We, the undersigned, offer [.....] in accordance with your Call of Tender entitled ***“CALL OF TENDER FOR THE AWARD OF PROCUREMENT OF STUDIES FOR THE REPAIR OF THREE (3) SHIP TO SHORE PANAMAX (STS) CRANES WITHIN THE FRAMEWORK OF MANDATORY ENHANCEMENT ME 08 “STUDIES” dated***

(_____) [Date] and our Offer. Our attached Financial Proposal is for the sum of Euros (_____)

[Amount in words and figures] and is our full and final offer that does not include VAT.

Item #	Total Price (€) (including VAT)
Cost of designs and studies for the repair of three (3) STS Panamax	

Our Offer shall be valid and binding (without any terms) vis-à-vis PPA for four (4) months after the expiry of submission date of the offers, plus two (2) months if PPA SA requests so according to the Tender terms.

We understand you are not bound to accept our Proposal and we are not entitled to any compensation in case of non-acceptance or withdrawal of our proposal.

Yours sincerely,

_____ [Authorized Signature]

_____ [Name and Title of Signatory]:

_____ [Name of Firm]

_____ [Address]