



**GENERAL INVESTMENT DIVISION  
INVESTMENT & PROCUREMENT DIVISION**

**CALL FOR OPEN TENDER  
(TED 053/2020)  
FOR THE SUPPLY OF TWO (2) DIESEL-POWERED 4X4 RO RO TRACTORS**

**TENDER PROCEDURE SUMMARY**

<b>OPEN TENDER</b>	
<b>ECONOMIC OPERATOR</b>	<b>THESSALONIKI PORT AUTHORITY SA</b> Main activity: Port services Address: Inside the Port of Thessaloniki PC 54625 Thessaloniki Tel: 2310593121, Fax: 2310510500 Email: <a href="mailto:secretariat@thpa.gr">secretariat@thpa.gr</a> Website address: <a href="http://www.thpa.gr">http://www.thpa.gr</a>
<b>Bid closing date</b>	<b>23/10/2020</b>
<b>Final date for submission of clarification requests</b>	<b>19/10/2020</b>
<b>Award criterion</b>	Most advantageous offer based on price and qualitative criteria
<b>Contact persons for information &amp; clarifications</b>	Name: George Papageorgiou E-mail: <a href="mailto:gpapageorgiou@thpa.gr">gpapageorgiou@thpa.gr</a> Phone: +2310593305  Name: Sachinidou Anastasia E-mail: <a href="mailto:asachinidou@thpa.gr">asachinidou@thpa.gr</a> Phone: +302310593354

## PART A: GENERAL & SPECIAL TERMS

### ARTICLE 1 - Description of the Contract scope

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#### 1.1. Scope

The scope of the tender is the procurement of **two (2) diesel-powered 4X4 RO RO tractors**, as described in detail in Part B' herein.

### ARTICLE 2 - Participation right

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#### 2.1 Eligible participants

**2.1.1.** Eligible to participate in the Tender are the natural or legal persons and, in the case of an association of economic operators, their members that perform professional activities relevant to the object of this tender, i.e. the manufacture and trade of diesel-powered tractors.

**2.1.2.** Tenderers must:

- Not be in a state of bankruptcy, liquidation or compulsory receivership.
- Not be convicted by means of a final judgement for the offences listed below. In the case of Limited Liability Companies, Private Companies and Limited or General Liability Partnerships, this requirement refers to the Administrators. In the case of Société Anonymes, this requirement refers to the Chairman and CEO. In general, this requirement refers to the natural persons managing the company in any case:
  - a) Participation in a criminal organisation, as defined in Article 2(1) of EU Council Joint Action No. 98/733/JHA,
  - b) Bribery, as defined in Article 3 of the Council Act of 26 May 1997(21) and Article 3(1) of Council Joint Action 98/742/JHA,
  - c) Fraud within the meaning of Article 1 of the Convention relating to the protection of the financial interests of the European Communities.
  - d) Money laundering, as defined in Article 1 of Council Directive No. 91/308/EEC, on the prevention of the use of the financial system for the purpose of money laundering.
  - e) embezzlement (article 375 of the Criminal Code)
  - f) fraud (article 386-388 of the Criminal Code)
  - g) extortion (article 385 of the Criminal Code)
  - h) forgery (article 216-218 of the Criminal Code)
  - i) perjury (article 224 of the Criminal Code)
  - j) bribery (article 235-237 of the Criminal Code)
  - k) bankruptcy fraud (article 398 of the Criminal Code)

#### 2.2 Quality Selection Criteria– Professional capacity

Eligible to participate in this process are the economic operators who in the last four years have supplied at least one hundred (100) diesel-powered RO RO tractors to the European Union, similar to the tendered ones. In case that the participating economic operator is a trading company, it suffices that the above criterion is met by the manufacturing company.

The participants must have an organized aftersales service with the adequate infrastructure and spare part stock. If the tenderer does not have its own infrastructure for providing aftersales service, he must provide the details of an authorized by the manufacturer repair workshop. Finally, if such authorized repair workshop does not exist in Greece, the participating company for the provision of aftersales service during the guarantee, must sign a cooperation agreement with the company-repair workshop having a demonstrated experienced and permanent personnel and repairs similar or equivalent machines.

### **ARTICLE 3 - Bid Submission modalities & time**

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Bidders may submit their bid to ThPA SA during business days and hours, by no later than **23/10/2020 at 15:00 pm**, not subject to terms, requirements, conditions or provisos.

#### **Address for bid submission:**

Thessaloniki Port Authority SA  
(Administration Division - Secretariat Department)  
Pier 1 (within the Port facilities)  
GR 540 12 Thessaloniki

After the closing date and time, it will no longer be possible to submit bids. Tenders submitted late shall be returned.

### **ARTICLE 4 – Tender extension, amendment, addition or annulment**

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ThPA SA holds the right to extend the bid submission date or in whole or in part, cancel the award procedure or decide to repeat it at any stage without any liability, cost or penalty, following the decision of its competent body. It also reserves the right to modify the terms of the procedure with transparency.

### **ARTICLE 5 – Clarifications on the Call of Tender**

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Clarification requests are submitted electronically five days at the latest before the expiry of the deadline for submitting bids, as follows: [asachinidou@thpa.gr](mailto:asachinidou@thpa.gr) with a copy to the email address: [gpapageorgiou@thpa.gr](mailto:gpapageorgiou@thpa.gr).

Clarification requests submitted in other forms shall not be examined.

The clarifications shall be posted on the THPA SA website [www.thpa.gr](http://www.thpa.gr).

### **ARTICLE 6 – Bid content**

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The contents of the tender folder are defined as follows:

- (a) one (sub)folder marked "Participation Documents - Technical Bid"
- (b) one (sub)folder marked "Financial Bid" and
- (c) an electronic storage medium with the content of the two above subfolders in electronic form.

#### **6. 1 – Contents of (sub)folder "Participation Documents– Technical Bid"**

In order to participate in the tender, the economic operators must submit the following participation documents:

##### **Participation documents**

- A certificate of registration in the relevant chamber (national economic operators) and a corresponding certificate/approval/authorization from the relevant authority of their country of origin (foreign economic operators).
- A solemn declaration by the economic operators that the grounds for disqualification defined in article 2 do not apply for them and the natural persons managing the company and that they have no reason to believe that these impediments shall apply during the tender validity period or any of its extensions.
- Presentation of the aftersales service department structure in Greece. If the tenderer does not have its own aftersales service department, he will present the structure of the after sales department of the authorized repair shop or the participating repair shop.
- A tractor Sales Statement listing at least 100 similar RO-RO tractors sold in the last four (4) years. The list must be accompanied by purchaser's certification, if any, or a certificate by the manufacturer.
- A Solemn Declaration whereby Candidates declare that they have been apprised on the special terms and requirements of the Tender Object and unreservedly accept the terms of the tender notice. In case of different opinion, he must explicitly state the points of divergence.

- To prove their lawful incorporation and representation, in the cases when the economic operator is a legal person, he shall produce the legal establishment and lawful representation documents (such as articles of incorporation, general commercial register certificate, Board of Directors formal establishment etc., in case of societe anonyme etc published in Commercial Registry, depending on the form of the tenderer). The above documents shall specify the lawful establishment, the person(s) legally binding the company on the date of the tender (legal representative, right of signature, etc.), any third parties authorized to represent the supplier, as well as their term of office.
- An ISO 9001 certificate of the manufacturer.
- A company presentation accompanied by the financial statements of the last year (2019).
- Information document for the processing of personal data, according to Article 13 of GDPR 679/2016, signed by the Candidate.

### **Technical Bid**

The Technical Bid consists of the following:

- i. Detailed and clear technical description of the items tendered. The technical description will consist of a point-for-point reference to the technical characteristics based on the structure of Part B of the tender and keeping the same numbering.
- ii. General plans and diagrams, official documents of technical specifications and any other official technical form documenting the compliance of the machines offered with the technical specifications herein.
- iii. Description of the training program.
- iv. Any other element that the interested party deems necessary.

### **Table of Main Technical Characteristics**

Bidders are invited to fully complete and submit the Table of Main Technical Characteristics attached to the Annex, signed by the participating economic operator. The tables constitute an evaluation criterion of the bids and state the technical specifications of the machine, the cost of acquisition and maintenance, the guarantees and the supply execution terms.

## **6. 2- Content of the Financial Bid Dossier**

### **Financial bid**

The financial bid shall bear the stamp of the participating economic operator and the signature of his legally authorized representative and will indicate:

- i. The offered price in Euro (VAT excluded), per tractor and in total.
- ii. the delivery time in full operation.
- iii. The performance guarantee time, which cannot be less than two (2) years from the date of the signing of the Acceptance Protocol.
- iv. The desired payment method, according to Article 14.5 of this invitation to tender.
- v. The bid validity period, in accordance with Article 7 of this invitation to tender.

### **Pricelist of Recommended Spare parts**

The participating economic operator will co-submit a brief description of the preventive maintenance programme, according to the Maintenance Manual of the Constructor, as specified in the relevant Table and a detailed report of the technical solutions to be applied in order to achieve the above goals and costs.

Moreover, a detailed table of the consumables and spare parts, which, at the discretion of the manufacturer, will be needed within a period of five (5) years will be submitted.

The offer will state the initial price of the items, the estimated delivery time, which will not exceed five (5) calendar days, the discount offered and the period during which the same discount will apply. The buyer can purchase at his sole discretion, those that he considers necessary.

## **ARTICLE 7 – Bid Validity Period**

The submitted offers must be valid for **ninety (90) days** from the bid closing date. Offers with a shorter validity period will be rejected as unacceptable.

The bid validity may be extended, if requested by ThPA SA, prior to its expiry, for a maximum period of time equal to the initial bid validity period specified in the invitation to tender.

## **ARTICLE 8- Counteroffers**

Alternative offers, counteroffers or amended offers or any proposals that may be construed as counteroffers shall not be considered and shall be rejected by the THPA SA competent body, SA, following the recommendation of the Tender Committee.

## **ARTICLE 9 - Language**

The official language of this procedure is Greek and English. All details of the bids shall be either in Greek or English (if they are drafted in the language of their country of origin) and accompanied by an official translation into one of the above languages. Where there is a discrepancy, the prevailing wording is always the Greek or in the alternative the English.

## **ARTICLE 10 – Bid Evaluation**

During the evaluation, THPA SA may address requests to the participating economic operators to provide clarifications and the economic operators must provide the clarifications within the specified deadlines, as the case may be.

Once the evaluation has been completed, the participants shall be notified on whether their bid has been accepted or rejected.

## **ARTICLE 11 - Award criterion**

The contract award criterion is the most economically advantageous tender based on the price and the following criteria.

Criterion	Criterion Score	Weighting Factor
Reliability - Manufacturer's sales	100 -120	20%
Performances–Technical characteristics according to the Tender	100-120	25%
Maintenance - Operating Cost, Spare Parts Cost	100-120	20%
Specialization - Technical support capacity	100-120	20%
Guarantee time	100-120	10%
Delivery time	100-120	10%

Scoring each evaluation criterion varies from 100 to 120 points. One criterion will be scored 100, if all the Tender requirements are met. In case that all requirements of the Tender are fulfilled, the score given will be up to the above threshold.

The weighed score of each criterion will arise from the product of each weighting factor multiplied by its score and the total score of the technical bid will arise from the sum of the weighted scores of all criteria.

The most advantageous offer is the one with the lowest offer price/score to the rating of the technical offer (i.e. The one where L will be the lowest number), based on the following formula.

$$L. = \text{Bid Total Price}$$

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## Technical Bid Final Score

### ARTICLE 12 – Price Adjustment

The offered prices shall be considered **fixed and final** and shall not be subject to any adjustments for any cause or reason, until the procurement is completed. For this reason, by participating in this Tender, interested parties explicitly, unreservedly and irrevocably waive all their rights regard to any adjustment of the offered prices that might arise from other relevant provisions.

### ARTICLE 13 – Contract

After the announcement of the tender result, a procurement contract is signed between ThPA SA and the selected economic operator.

The contract may be amended during its term of validity, following an agreement between the two parties.

### ARTICLE 14 – Special Terms of the Procurement

#### 14.1 Performance bond

The Contractor shall submit a Performance Bond, the amount of which is defined as 5% on the contract value, not including VAT, delivered before or upon contract signing.

The Bond is issued by Greek credit institutions and covers the implementation of all contractual terms and requirements of THPA SA against the supplier, in their entirety and without discriminations.

The performance bond shall be forfeited in the case where the terms of the contract are violated, as specifically defined.

#### 14.2 Good performance letter of guarantee

A Good Performance letter of guarantee, the amount of which is defined as five per cent (5%) on the contract value, not including VAT, expiring sixteen (60) days after the end of the performance warranty period (Article 8 – Part B), is delivered upon the reception of the equipment.

In the case where the supplier fails to comply with his contractual obligations, ThPA's competent body shall recommend the forfeiture of the Good Performance letter of guarantee, in all or in part.

#### 14.3 Pay - Suggested payment method

The procurement is financed from the regular budget of ThPA SA

An amount up to twenty-five per cent (25%) of the total contract value, VAT not included, may be provided as an advance payment upon signing of the contract and against an Advance Payment Bond.

After the relevant Protocol signing and the successful completion of controls and training, ninety-five (95%) of the total value (after deducting the advance payment) is paid to the supplier and the advance payment bond will be returned. The payment will be made within sixty (60) days from the issuance of the invoice subject to the presentation of an insurance clearance certificate.

The remaining five percent (5%) is paid to the Contractor after the completion of the process of issuing the plates.

#### 14.4 Issuance of product license.

The Contractor shall state in his Bid the additional cost and the delivery time, that will be required for the issuance of the type-approval certificate of the machines and the issuance of a product license as Special Purpose Vehicles, where this will be completed in the corresponding table in the annex.

## **PART B - TECHNICAL TERMS AND SPECIFICATIONS**

This tender's scope is the procurement of:

Two (2) diesel-powered RO RO tractors with a two-driving 4x4 axle system and elevating fifth wheel with pin for coupling and towing and carrying loaded 20', 40' and 45' ft container trailers on RO RO ships at ThPA SA piers.

### **TRACTOR TECHNICAL DESCRIPTION AND SPECIFICATIONS**

#### **A.1. TRACTOR SPECIAL CHARACTERISTICS**

##### **A.1.1. GENERAL**

Tractors will be of top quality, new, unworn, free of manufacturing defects or faults, of modern technology, newly manufactured, products of industrial production run, suitable for operating at the port in adverse weather conditions, rain, wind, humidity from the sea etc. The machines will be manufactured in accordance with the applicable DIN regulations of high-quality and high-durability metals and designed to achieve a maximum carrying capacity with a minimum manufacturing weight (in tn).

The tractors shall be capable of carrying towable trailers linked through a fifth wheel and a coupling pin both on RO RO ships and in RO RO piers.

##### **A.1.2. MINIMUM CAPACITIES**

The minimum capacity of the tractors is described on the compliance table

1. No-load speed  $\geq$  **25 Km/h** that will be reached in the shortest possible time.
2. Minimum Gross Combination Weight (G.C.W.)  $\geq$  **80000 Kg**.
3. The fifth wheel will bear a static load of **36 ton** minimum.
4. Maximum lifting capacity of the lifting hydraulic cylinders shall be at least **34 ton** (static load).
5. The engine power shall be at least **170KW/2200** rpm as per ISO 3046, with a +/- 10% tolerance.

##### **5.1. The tractive effort with Gross Combined Weight shall be set by the Tenderer.**

To provide a Tractive Effort diagram in relation to speed and value of Tractive Effort at a speed of 5km.

- 5.2. Gradeability: if fully loaded, it will be at least **10%** (the relevant diagrams must be provided in conjunction with speed and the G.C.W. weight).

##### **A.1.3. FRAME**

The frame will be powerful with a robust construction preferably with longitudinal welded U-shaped beams or compact steel plates of an appropriate thickness. The space outside the cab will be adequately arranged and fitted with a slip-free floor, to allow the operator to connect and disconnect the semi-trailers on top of the vehicle, without getting off. In addition, it will have special front and rear pins (on the chassis) in order to be towed by another vehicle or tow another vehicle.

On the side, the frame will be resistant and continuous for security purposes and will have strong front and rear bumpers (it shall have plastic bumpers and rain flaps). On both sides, it will have metal supports especially for the fuel and oil tanks, for protection against side shocks and metal covers.

The suppliers must describe all the technical data required in their bid.

#### **A.1.4. AXLES - SUSPENSION**

The tractors shall be 4X4 with two axles (both shall be driving axles). The axles shall be heavy duty, shall have sufficient strength in order to receive safely the growing loads when braking. The suspension of the front axle shall have parabolic springs on anti-vibration elastic mounts and double acting telescopic shock absorbers, while no maintenance will be necessary. Its minimum lifting capacity shall be 16tn at 20km/hr speed.

The **rear axle** shall have an **air suspension system**, a telescopic shock absorber, lifting-descending level control valves and a stabilization system when the fifth wheel is loaded. Its minimum lifting capacity shall be 38tn at 20km/hr speed.

Upon delivery, a full detailed technical description of axles and suspension, their types and manufacturers will be provided.

#### **A.1.5. DRIVER'S CAB**

The driver's cab is located at the left side of the tractor, shall be made of robust construction in order to protect the operator in case of an overturning. A certificate and a test report as per **FOPS/ROPS as per ISO 3449 / 3471 respectively will be provided.**

The cab is based on anti-vibration mounts (to be described) and provides comfort and an excellent working environment for the operator. The noise level shall be as low as possible. The bid shall indicate the noise level inside the cab with the door closed, as measured based on the applicable European Directive.

The glass panels shall be LAMINATED to prevent breakage and TINTED to protect the operator from getting dazzled by sunlight. The front and rear glass panels shall have electric windscreen wipers, 2 speed with windscreen washers and sunshades inside. The driver's side glass panel shall be sliding. The cab, preferably with an elevated (inclined) roof for a wider visual field when loading containers, shall have a door on the side which will lock. Also, it will stabilize in the open position.

The operator's seat shall be comfortable and shall have a 180° swivelling capability to ensure visibility both in front and at the back - two operating positions - fully adjustable ergonomic, orthopaedic swivelling seat with a vibration dampening system (AIR SUSPENSION SEAT), armrest preferably reversible and a 3-point seat belt. The seat (pan and back) pad shall be made of fabric or high resistance leatherette (the brochure of the manufacturer of the seat shall be provided).

The handling and control instruments shall be placed in a way as to make manoeuvres and observation comfortable. A detailed list thereof will be provided. Also, the tenderer shall fill in Par. 5, Operator's Cab of the table.

All the cab handling instruments shall be ergonomically designed.

The cab through a hydraulic system with a manual hydraulic pump can be inclined forward (**at least 45°**) in order to make interventions to the engine - technical maintenance easier.

The cab shall be secured at a horizontal position using security pin or screws. The cab shall have a cooling system that can lower the temperature during the summer months inside the cab by at least 10 °C compared to the outside temperature. A full description of the A/C system, which will be automatic will be provided. There will be a filter for the incoming air. The cab shall have exterior mirrors on both sides. Inside the cab, there will be two (2) mirrors, one of which should preferably be heated or parabolic, a light, an ashtray and an appropriately placed outlet.

Provision should be made in the cab for the installation of a GPS system by the Contractor.

The signs on the handling and indication instruments will be in Greek. All the mast and spreader functions will be run by a joystick in the operator's right arm rest. There will be a button to stop the spreader's movement in the event of a risk. In the cab there won't be any hydraulic piping routes, hydraulic valves etc. i.e. components that could pollute the space.

Tenderers in their bid must give a detailed description of the operator's cabin accompanied by the necessary drawings showing the lay out of the operator's seat, the joy sticks and instruments in the cab. Also, a description of the A/C system will be provided (power, manufacturer etc).

Given that the machines shall operate in a highly corrosive sea environment, detailed descriptions of all phases (cycles) of processing and protective painting of both the cab and the frame must be submitted for evaluation by the evaluation committee.

#### **A.1.6. LIGHTING - OUTLETS**

The lights shall be strong and adequately protected (preferably recessed in the frame). The machine will be fitted with low and high beam driving lights, indicator lights, flashing parking lights, reversing lights and, generally, any other equipment provided for by the Highway Code for movement inside the ports. Lights may be connected through a sealed plug with the semi-trailer (voltage of the semi-trailer: **24V**). For the connection cable, there will be a NATO 24V outlet, which is suitable for starting another immobilized tractor. At a suitable place at the right end of the roof, there will be a manually rotating spotlight and an orange alarm rotating light.

#### **A.1.7. DIESEL ENGINE**

The engine shall be diesel-powered turbocharged/ intercooler or aftercooler), manufactured by a recognized manufacturer with a rated power of approximately **170 KW/2200** rpm as per ISO 3046. The maximum engine torque shall be set by the Contractor. It shall be four-stroke, multi-cylinder engine - the number of cylinders shall be set by the manufacturer, pressed lubrication system, with easily removable oil and air filters and a separate oil cooler. The air filter shall be of heavy duty and shall have a purity indicator. There will be also an air prefilter for the retention of microparticles and a water trap in the fuel flow (with a warning light in the cab). The exhaust piping shall have a silencer, a heat shield. The daily control and refill points (oil, water, engine and windscreen wipers, brake fluids etc.) shall be concentrated and easily accessible at a place, where it is not necessary to lift the cab.

**The type approval of the engine shall be submitted together with the bid, according to the applicable European Directive, which will fulfil the new anti-pollution technology, phase: Euro stage V.**

The exhaust emission limits shall be set in compliance with the Greek and EU Legislation on the date of issuance of the product license of the machine. If, during the period between the bid submission date to the machine delivery date, there is a requirement to modify the exhaust emission limits, the contractor shall replace the engine according to the new instruction, without extra charge for ThPA SA.

The bid shall indicate all the details of the engine (type, power as per ISO 3046), the rated speed, the number of cylinders, stroke-bore ratio and ram travel, engine capacity, compression, speed frequency, power/power speed and torque/torque speed diagrams etc.), the electric system (starter, alternator etc.) and all auxiliary systems of the engine (fuel pump, water pump etc.)

The engine shall have a full protection with an auto stop in case of:

- Engine's low oil pressure
- Coolant high temperature
- Coolant low level

Also, the engine shall stop automatically and an alarm and sound signal indication, in the following cases:

- Blocked hydraulic oil filter,
- Low air pressure of the braking systems,

- Failure at the vehicle's central electronic control unit.

Locking feature for starting the engine with the transmission placed in neutral and locking feature for preventing start with the engine already running.

Alarm indications (failure codes):

- Disconnection of the engine's electronic control unit.
- Maintenance (replacing engine oil)
- Presence of water in the fuel.

The engine can also start at a low environment temperature (-5°C). There will also be an engine warm-up system that will operate through the ignition switch in order to facilitate engine starting at lower temperatures.

Fuel tank of sufficient capacity of at least 300 lt (made of stainless steel 316L), secure.

All different spare parts of the engine (oil pump, starter, alternator etc.) should be manufactured by recognized manufacturers for the Greek market. All their features shall be fully presented in the Technical Bid.

#### **A.1.8. TRANSMISSION SYSTEM**

The gearbox shall be fully automatic, with a torque converter / power shift transmission with 4 forward gears and one reverse gear, fully synchronised with the option of a direct speed selection from forward gear to reverse gear using the appropriate safeguards.

Both the converter and the gear box shall be manufactured by a recognized manufacturer. The safety devices of the gear box shall be described. There will be a selector on the cabin's panel allowing the manual speed engagement. An automatic control shall be carried out in the presence of an operator on the seat in order to then allow the gear engagement and start of the tractor. The transmission system shall have its own oil cooler and filter.

Participants shall make a detailed description of the transmission system in their bid.

#### **A.1.9. STEERING SYSTEM**

The steering system with orbitrol shall be fully hydrostatic (hydrostatic power steering), **with hydraulic double acting cylinders** for easy handling and bigger flexibility.

A drawing of the steering system including a description of various elements such as pump, hydraulic cylinder, valves etc. and description of the operation of the steering system shall be submitted together with the bid.

There will be an emergency steering in case of an engine breakdown.

The steering wheel shall be adjustable at various positions depending on the preferences and the needs of every machine operator.

The tractor's turn radius at the front bumper shall be set by the Tenderer. For a better flexibility, the outer turn radius shall be as small as possible.

#### **A.1.10. BRAKE SYSTEM - PNEUMATIC SYSTEM**

The brake system shall be pneumatic and shall actuate the brakes on the wheels through a separate circuit (for the front and rear axles) for an increased safety. A full description of the brake system, the parking brake and its security system shall be provided. The braking surface shall be proportional to the stress and the maximum surface of the vehicle. The tractor's brake system shall be connected by means of a quick connector (ISO 1728) and a spiral of pipes (red and yellow) with the brake system of the semitrailer. There will be retention devices for the spiral pipes. Compressed air reservoirs of sufficient capacity. The system will include an air dryer and an external air output for inflating tyres. A full description of the pneumatic system and its components shall be submitted together with the bid.

#### **A.1.11. FIFTH WHEEL - HYDRAULIC SYSTEM**

The fifth wheel will be able to bear a static load of at least 36 ton with a 34 tn minimum lifting capacity and shall have a socket for 2" SAE (KING PIN) as per ISO 337: 1981 or DIN 74080.

The surface of the fifth wheel shall be particularly hard in order not to be damaged when connected to the plate of the semi-trailer.

The locking of the pin shall be done automatically using springs while its unlocking will be done using a manoeuvre from the driving/handling cabin and also mechanically.

The unlocking of the pin must not be possible during the movement of the vehicle.

The locking/unlocking of the fifth wheel pin shall be able to control the proper operation of the system sensors and show every malfunction through a light indicator and an audio signal in the operator's cabin.

The fifth wheel shall be lifted hydraulically while it can be inclined toward the longitudinal axis.

The height from the soil of the top surface of the fifth wheel at the lowest position shall be **1000 mm**, and at its highest position with an angle not bigger than 10' and a travel time - fully loaded - not exceeding 12". The distance between the KING PIN and the back side of the cabin, at the highest position of the fifth wheel shall be set. The bid shall include a full technical description (e.g. Type, manufacturer etc.)

There will be a hydraulic oil reservoir and appropriate filters on the return line of the reservoir and on the suction line.

#### **A.1.12. ELECTRIC SYSTEM - INSTRUMENTS, INDICATORS AND CONTROL - ON/OFF SWITCHES**

The electrical system voltage shall be 24V. There will be at least two 140ah accumulators to meet the needs of every tractor.

The alternator and the starter shall be of heavy duty. The brand and the type shall be indicated on top of them on an embossed marking or on a fixed sign. The alternator shall be powerful in order to cover all the consumptions of the machinery during night operation.

The remote-control switches, the electric equipment, the accumulators, the instruments, the cables shall be of high quality.

The electric spare parts and the lights shall be watertight and corrosion-resistant, suitable for operation in a sea environment. The lights both at the front and at the rear part of the tractor shall be LED lights. Their features shall be presented on the Table of Technical Specifications. **Annex 1**

The cables shall be codified with a colour and number for an easy detection of failures.

The main switchboard including the electric and electronic components shall be placed in the operator's cab for protection against dust, water etc.

The indication, control and operation panel, with the appropriate lighting of the instruments at night, shall include at least:

- Ignition switch
- Differential lock control
- Lighting switches
- Fifth wheel operation switch (climbing/descending/unlocking)
- Speedometer
- Revolution counter
- Operation hour meter
- High intensity acoustic horn >100Db.
- Windscreen wiper/water spray switches

- Error/malfunction errors
- Light indicators for:
  - Charging alternator
  - Blinker
  - Use of handbrake
  - Air filter blocking
- System indication/diagnosis with visual signalling and audible warning for:
  - Damage of gearbox
  - Engine's low oil pressure
  - Engine failure
  - Air circuit low pressure
  - Fuel low level
  - Low level

Apart from the above, the tractors shall have all the necessary instruments for the operation and the control of their individual mechanisms and systems while all the instruments shall be fitted in such a way as to make handling and control by the operator easy.

Tenderers will fill in on the respective table all the necessary indicators on the table of technical specifications.

The full control of operation of every machine shall be conducted through a system of electronic control units connected with each other and with a central unit. The whole system will constitute an electronic network while for the exchange of data, signals etc between the system units, the **CAN-BUS** technology will be used.

To reduce the fuel consumption, the hydraulic system of every machine shall bear a load sensing system that will allow adjusting the power supplied to the load.

A coloured brochure or photo or drawing showing the place of the operator and the configuration of the instruments and the detailed list indicating all the required instruments, indicators and switches as well as all tendered items required for the control and the operation of tractors, to be evaluated.

#### **A.1.13. WHEELS - TYRES**

The machines shall be six-wheel drive (2/4) with double rear driving wheels. All six (6) tyres shall be of the same type and size 310/80R22.5 ) - radial heavy-duty industrial tyres, Load Index/Speed Index, made in Europe manufactured by a recognized manufacturer. Participants shall indicate in their bid the manufacturer, the type, size as well as the Load Index/Speed Index of the tyres. The wheel rims shall have taper holes for bolts.

The tyres shall be new and no older than 9 months from the delivery date of the vehicle.

#### **A.1.14. COLOUR - EXTRA EQUIPMENT**

All metal surfaces shall be subject to an anti-corrosion protection and shall be painted with special corrosion resistant colours. The paint system shall be as per ISO 12944 or DIN 55928, C4 exposure class and at least 240mm dry film thickness.

The tractors shall bear from either side the ThPA SA initials, clearly visible from a distance.

Tenderers shall provide a detailed description of the paint method, the manufacturer of the colours and the dry film thickness for every stage of painting.

The paint system for the frame and the parts of the chassis shall comply with the latest international environmental requirements. The paint shall guarantee protection against the highly corrosive

conditions prevailing at the port, for at least ten (10) years.

The ThPA SA initials shall be written at appropriate spots on both sides of the machine.

## **A.2. BOOKS - TOOLS - ACCESSORIES**

### **A.2.1. BOOKS**

Upon delivery, the tractor shall be accompanied by the following:

- A.2.1.1. Two illustrated Operation and Preventive Maintenance Manuals that **shall be written** in Greek.
- A.2.1.2. Two illustrated Maintenance, Service & Workshop Manuals. These books will include an extensive table of possible damages and trouble shooting methods for all main systems of the machine.
- A.2.1.3. Two full sets of detailed drawings explaining the hydraulic circuits.
- A.2.1.4. Two illustrated Spare Parts Book. The above books will cover all system parts (engine, gearbox, steering system, axles-suspension, brakes, fifth wheel, electric and hydraulic system etc.)
- A.2.1.5. The above books will also be delivered in electronic format (CD-ROM).

The above books shall be detailed and refer to all system parts.

The above books will also be delivered in electronic format (CDROM).

### **A.2.2. TOOLS**

Every machine will be accompanied by a separate, full set of equipment & devices (electrical, mechanical, electronic, tablet, laptop etc.) and tools for diagnosing failures, performing all measurements, controls and setting, as set out in the maintenance book. The equipment shall be described in detail in the participant's bid.

The training of ThPA SA personnel will include the use of the equipment & devices used at work (performing measurements, controls and settings).

All the relevant codes of the settings **and** failures shall be included in every machine's Operation & Maintenance manual.

The tenderer will deliver the suitable software and hardware for detecting errors, targeting and changing data of both the engine and the transformer.

### **A.2.3 ACCESSORIES**

Every tractor will be equipped with:

A 6 kg fire extinguisher appropriately placed.

A warning triangle.

A first aid kit appropriately placed in the cabin.

A fully sized spare wheel.

A set of spiral hoses and cable for trailer. It will also be accompanied by any other equipment to be lawfully placed on the market (specify the equipment).

### **A.2.4. ACCESSIBILITY - EASE OF MAINTENANCE**

Access to the parts requiring frequent maintenance or inspection must be easy.

The parts that need to be replaced after a certain period, according to the manufacturer's instructions, shall be easily replaced. The bid shall describe the access to the main parts of the machine (engine, gearbox etc.).

## **A.3. SPECIFICATIONS - CERTIFICATES**

A.3.1. All specifications and standards based on the applicable Legislation - according to which the tractors and their special equipment has been manufactured and tested must be indicated and indicate the certificates that will be produced upon delivery of machines. Bids that are not accompanied by the above certificate shall be rejected as unacceptable and shall not be considered.

A.3.2. The tractors shall bear the 'CE' marking and the actual capacity sign, in compliance with the

EU instructions. The bid will be accompanied by a copy of the **CE** marking Certificate.

A.3.3 In his bid, the Tenderer will indicate as an option the possibility to arrange the issuance of the registration plates and cover their cost.

#### **A.4. TABLE OF TECHNICAL FEATURES**

The TECHNICAL BID folder accompanying the bid will include the attached tables following the Call Annex. Every Tenderer shall record the table the data of the machine's manufacturer (production line).

#### **A.5. DELIVERY**

The equipment will be delivered at the purchaser's facilities at the expense and on responsibility of the seller.

If the seller wishes the final assembly of the machines to take place at the purchaser's facilities, the following shall apply:

The buyer shall provide to the seller for free the required outdoor space for the assembly and the putting into full operation of the machines.

The seller can use the purchaser's machines, if they are available, upon payment of the royalties that will apply on the concession time.

The assembly of the machines at the Port of Thessaloniki will be done at the expense and under the responsibility of the seller. The buyer shall not be liable for any damage or accidents incurred to the Contractor's personnel or any third parties during the performance of the works and until the full delivery of the machine and the dismantling of the construction site. For all the above, the Contractor bears the full civil and criminal responsibility.

#### **A.6 DELIVERY TIME**

The total delivery time is set by the economic participants in their offer and cannot exceed six (6) months from the signing of the contract.

In case of late delivery, a 1% penalty on the contractual price shall apply for each day of delay, up to a maximum of 5%.

#### **A.7 TESTS-CONTROLS-RECEIPT**

Every Machine shall be delivered after completion of the issuance of the A.A Type certificate by an independent body - the cost shall be borne by the Contractor - and a 10-hour tested smooth operation.

Upon delivery, the following controls will be performed:

- General inspection and verification of the compliance of the machine manufacture with the Contract.
- Control of the machine operation with a rated load.
- Speed - travel measurement of the machine loaded/unloaded, fully loaded, gradeability.
- Safety system control.
- Brake and setting control.

Control of maintenance point accessibility.

**The supplier shall perform the first two periodical maintenance, provided by the manufacturer, on his responsibility and at his expense (materials-lubricants-labour). Tenderers shall indicate in their bid the operating hours for every maintenance, the necessary works and the manufacturer's technical manual, as stated above.**

The first maintenance performed to make the necessary settings after the entry into service is not considered to be a periodical maintenance.

The supplier shall make available for at least five (5) days, a technical crew of the manufacturer or his representative for an initial technical support of the machinery and the training of the personnel.

## **A.8 GOOD PERFORMANCE WARRANTY**

### **A8.1. Good Performance warranty period**

The minimum acceptable good performance warranty period is twenty-four (24) months / or six thousand (6.000) hours of operation, commencing on the date of signing of the acceptance protocol. During the warranty period, the contractor shall restore any damage or fault resulting from poor workmanship or defective materials. More specifically, the contractor shall respond within 48 hours by deploying a specialized technical team. If the supplier fails to restore the damage or fault within a reasonable time within the guarantee time, ThPA SA reserves the right to restore it by its own actions, ascribing the cost to the seller.

If the machine is out of order for more than four (4) days, the total guarantee time will be extended accordingly.

The time period between the failure event notification to the supplier and the delivery of the machine by the supplier in full operating condition will be the period out of service. If the machine remains immobilized due to a damage of its main operations (engine, pumps etc), the replaced spare parts will be necessarily accompanied by a guarantee with the same duration as the initial one.

### **A.9 TRAINING-MONITORING THE TRACTORS OPERATION**

Immediately after the delivery of the machines in full operation, the seller shall make available for at least five (5) days the necessary personnel for monitoring the initial stage of the machine operation, restore any damages and, train one (1) team of five technicians of the purchaser on such subjects as the machine control, adjustments, repairs and functions. The training of the technicians shall cover all single systems of the machine (mechanical, electrical, hydraulic) and will take place in a classroom but also on the machine. Moreover, the Contractor shall train at least five (5) operators on the machine operation and simple maintenance.

Training will be held in Greek. If interpretation is required, the cost will be covered by the seller.

Upon completion of the above stage (monitoring the machine operation - training of ThPA SA personnel), the Contractor will grant to the purchaser a training certificate.

### **A.10. OTHER TENDERERS' REQUIREMENTS**

Technical bids shall also include:

1. Certificate of the country of origin of the machines they provide, the manufacturing plan where they are manufactured, their place of establishment and the obligation to produce a relevant origin certificate. Any offer missing the above certificate will be rejected as unacceptable.
2. General drawings and technical specifications of the machines in Greek or in English.
3. A detailed technical description, in Greek, with full, clear and detailed technical data about the above items in order to allow the evaluation of this tender by the evaluation committee without the need for additional data. Detailed and clear answers (and not vague answers such as 'I agree', 'Yes' etc.) in each paragraph of Article 1 with the same numbering.
4. As regards after sales service, tenderers must have an organized aftersales department with the adequate infrastructure and spare part stock. If a tenderer does not have its own infrastructure for providing aftersales service, he must provide the data of a repair workshop authorized by the manufacturer. Besides, participants are required to respond in case of damage of the machine, within (48) hours from the official notification of the damage, by deploying a specialized technical team during the guarantee time. In the case of a non-resident company, it must attach a cooperation agreement for the after sales technical service signed with a Greek company - repair workshop - heavy vehicle maintenance, capable of responding to the repair-maintenance requirements of the machines under procurement. In case of a non-valid response, ThPA SA can proceed to lifting the rest position of the machines ascribing the cost to the Contractor and alternatively ask for the forfeiture of the letter of guarantee.

5. The attached Tables duly completed and **any other data that may be requested by the interested party** to describe the machines offered (technical manuals, photos etc.)
6. The participating economic operator shall co-submit an economic bid for the spare parts and the consumables which, at the discretion of the manufacturer, will be needed within a period of five years. The bid will state the initial price of the items, the estimated delivery time, which shall not exceed five (5) business days, the discount offered and the period during which the same discount will apply. The buyer can purchase at his sole discretion, those that he considers necessary.

**THE MANAGING DIRECTOR - CHIEF EXECUTIVE OFFICER OF THPA SA**

**FRANCO NICOLA CUPOLO**

## ANNEX 1

**UPDATE ON THE PROCESSING OF PERSONAL DATA, pursuant to Article 13 of the GDPR 679/2016 (accompanies the Application Forms in Tenders-Calls-Offers etc. of the Procurement and Investment Division of "ThPA SA").**

The Société Anonyme under the name "Thessaloniki Port Authority" (ThPA SA, Law 2688/99, GG 40A/1-3-99), having its registered office in Thessaloniki (Pier 1, inside the Port PC: 54625, tel: 2310 593 118-121), as legally represented, hereby informs and, in conformity with the provisions of the applicable legislation on the protection of personal data, and, the General Regulation EU 679/2016 in particular, in its capacity as a "Controller", the natural person (hereinafter the "Data Subject"), who signs the Application Form, the Offer or other similar form of the Procurement and Investment Division of "ThPA SA" and submits the necessary supporting documents, either on its behalf, as a representative of a private company or as a natural person -legal representative of the participant in the legal person procedure, or in another similar legitimizing capacity, that ThPA SA and its competent Services-Divisions-Departments (such as its employees, acting under its supervision, by order and on its behalf and within the framework of their powers and, possibly with others, jointly referred to as "Controllers" and "Processors", third parties or recipients: other participants in the procedure, Ministries, public authorities, Tax Offices, Judicial Authorities etc. based on the compliance with the legal obligation of the "Processor" or in fulfilment of his duty or for performance of a contract), collects, processes and retains the personal data included in the Application Form, Offer or any other document of the Procurement and Investment Division of "ThPA SA" and in its accompanying documents, which are voluntarily submitted to "ThPA SA" by the "Data Subject" either on his behalf (private company) or on behalf of the legal person representing it.

These data will be used for the purposes of handling the Application Form, the Offer or any other similar document of the Procurement and Investment Division of ThPA SA. The purpose of processing may be: The evaluation of the Application/Offer etc, the verification of the details of the «Data Subject» or the company that it represents, required by the procedure, the evaluation of the suitability of the «Data Subject» or the company it represents, as a candidate counter-party towards the conclusion of a contract with "ThPA SA" or with a view to concluding a contract (Article 6, par 1b GDPR ~~Art. 44~~ 44). Furthermore, "ThPA SA" processes such data in order to communicate with the "Data Subject" whenever it considers it to be necessary, on issues relating to the procedure and for reconciling "ThPA SA" with the requirements of the Regulation and law (compliance with his legal obligation, Article 6, par 1c GDPR) These data are kept at the competent Procurement Department for as long as it is necessary to check the Application/Offer etc. and the data submitted therein, throughout the period needed to complete the procedure, throughout the period of submission of any objections and lodging an appeal that may be provided for internally or by law, throughout the period of fulfilment of both parties' obligations and the period of limitation for bringing claims and, generally, for as long as it is required from the letter and the spirit of the Subcontracting and Procurement Regulation and the relevant law and contracts governing the operation of ThPA SA, as applicable. Then, they are filed, either on paper or electronically in such a way that access is not authorized to non-authorized employees. After the elapse of the necessary time period, they will be safely destroyed, as provided for by the relevant legislation (the provisions of Article 191 §2 of Law 4610/2019 (A'70) apply for the period up to the 23-3-2018, while, the maximum limitation period laid down in the Civil Code shall apply from then on and for the conversion of the Processor into a SA. The provision of such data is necessary for this procedure and, failure of the "Data Subject" to provide them will lead to the inability of the Data Subject to participate in the procedure and the impossibility of providing such service.

The "Data Subject" can submit a request to the "Controller" on: Access-information, correction, limitation of the processing of data regarding it, objection to processing, erasure of data and data portability subject to the conditions and limits laid down by the applicable legislation (e.g. 17 par.3, 20 par.3, 23 GDPR). These rights are exercised either by filling in the relevant application form available on the Protocol and the Investment and Procurement Division of "ThPA SA", or by sending a letter to the address: "ThPA SA", Pier 1, within the port, PC: 54625, Thessaloniki, tel: 2310 593118-121, or by sending an email to the address: {HYPERLINK ".\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\NIZXCBTB\dpo@thpa.gr"}. The "Controller" provides information to the "Data Subject" about the action held upon request, pursuant to Article 15 to 22 of the GDPR without delay and, in any case, within one month from the reception of the request. This deadline may be extended by two more months, if required, taking into account the complexity and the number of requests (see more in detail: Article 12, par. 3-4 GDPR. Also, in case of a complaint, the "Data Subject" is authorized to contact the Hellenic Data Protection Authority in writing (address: 1-3 Kifissias Str. P.C. 115 23, Athens) or by e-mail ([www.dpa.gr](http://www.dpa.gr)).

Thessaloniki, \_\_\_\_/\_\_\_\_/20\_\_

7th Edition/2020

I have become aware of this Update (signature and in full letters)

ANNEX 2 - TECHNICAL SPECIFICATIONS COMPLIANCE				
Tender Ref.	Date of issue of Bid	Date of Bid		
	Project	THPA, Thessaloniki, Greece		
	Bidder	Name		
ITEM	DESCRIPTION AND REQUIREMENTS	COMPLIANCE or PROPOSAL	DEVIATIONS if any	COMMENTS
<b>1. SCOPE OF SUPPLY</b>				
<b>Introduction</b>		<del>XXXXXXXXXX</del>		
Number of tractors	2	<del>XXXXXXXXXX</del>		
Model	RORO tractor	Reference of the Bidder		
Drive configuration	4 x 4	Yes/No		
5th wheel	Sturdy elevated 5th wheel for coupling with a standard 2" diameter King Pin	Yes/No		
Type of cargo	ISO containers of 20ft / 40ft / 45ft shall be handled	<del>XXXXXXXXXX</del>		
Cabin	Left hand drive (LHD)	Yes/No		
Certification	Compliance with Greek regulation, import licenses, required authorization and license plates	Yes/No		
<b>Options</b>		<del>XXXXXXXXXX</del>		
Option 1	Cabin protection cage	Yes/No		
Option 2	Set of critical spare parts	Yes/No		
Option 3	Set of consumables and filter kits	Yes/No		
Option 4	Extra bars protection	Yes/No		
Option 5	Second seat for trainer	Yes/No		
Option 6	Fuel saving system	Yes/No		
<b>2. DESIGN CRITERIA</b>				
<b>Applicable standards and codes</b>		<del>XXXXXXXXXX</del>		
Certification	CE marking, compliance with Machinery Directive 2006/42/EC	Yes/No		

Structural steel	EN 10025, type S355J0 or equivalent	Yes/No		
Gearing	ISO, AGMA, BS	Yes/No		
Electrical installations	IEC standards	Yes/No		
Hydraulic installations	ISO 5781 (2016) ; ISO 4413 (2010)	Yes/No		
Surface preparation and Painting	SSPC, ISO 8501-1, ISO 12944	Yes/No		
Welding	AWS, BSI, DIN	Yes/No		
Noise	ANSI S12.33 or EN 15011, Noise test code	Yes/No		
Measuring units	International unit system	Yes/No		
HSE	OSHA, ISO 1182, ISO 2631	Yes/No		
Quality process	ISO 9001 latest edition	Yes/No		
<b>Environmental conditions</b>		<del>Yes/No</del>		
Climate type	Mediterranean climate ; Exposure to snow (up to 20 cm) and rarely ice during winter months	Yes/No		
Atmosphere	Salt laden marine environment with fine sand	Yes/No		
Temperature	Ranging from -5°C to 40°C (direct sunlight)	Yes/No		
Relative humidity	Ranging from 60 to 100%	Yes/No		
Max wind speed during operations	24 m/s	Yes/No		


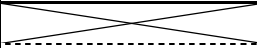

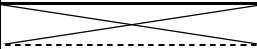
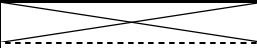
3. MAIN SPECIFICATIONS				
<b>Main dimensions</b>		<del>Yes/No</del>		
Wheel base	Minimum 3,200 mm	proposal		
Overall dimensions (length, width, height)	To be specified by the Seller	proposal		
Front/rear turning radius	To be specified by the Seller	proposal		
Base height of the fifth wheel	<1,000 mm	proposal		
Minimum fifth wheel load combination	To be specified by the Seller	proposal		

Dead weight without trailer	To be specified by the Seller	proposal		
<b>Main performances</b>		<del>proposal</del>		
Maximum speed (laden)	25 km/h	Yes/No		
Maximum speed (unladen)	25 km/h	Yes/No		
Speed limiter	Adjustable by the maintenance staff	Yes/No		
Minimum Gross Combined Weight (GCW)	80 ton @ 25 km/h	Yes/No		
Max traction (kN)	To be specified by the Seller	proposal		
Towing pin attachments	Front and rear	Yes/No		
Steering system	Fully hydrostatic orbitrol steering system with double acting steering cylinder	Yes/No		
Min. turning radius over front bumper	To be specified by the Seller	proposal		
Front axle capacity	minimum 16 ton (@ 20 km/h)	proposal		
Rear axle capacity	minimum 38 ton (@ 20 km/h)	proposal		
Fifth wheel capacity	36 tons	proposal		
Fifth wheel lifting capacity	34 tons	proposal		
Fifth wheel raise/lower speed	With laden load, no more than 12 seconds from lowest to highest position	proposal		
Operations	Continuous 24 hours/7 days per week, interrupted only for recommended maintenance	Yes/No		
<b>Chassis</b>		<del>proposal</del>		
Structure	No plates, bars, angles, platform supports of less than 6mm thick	Yes/No		
Front suspension	Parabolic leaf springs in rubber mountings with 2 telescopic shock-absorbers	proposal		
Rear suspension	Pneumatic suspension with 2 telescopic shock absorbers + release valve	proposal		
Protection for battery, tanks and reservoirs	The fuel tank together with hydraulic and air reservoirs and all other components shall be mounted in easily accessible but well protected	Yes/No		
Access to cabin	Access steps with anti-slip surface integrated in the chassis Handrails shall be fitted	Yes/No		
Sliding plate	Reinforced plate to fifth wheel (example in next slide)	Yes/No		
Drawbar coupling on bolted plate	Heavy duty, automatic closing with quick release lever and securing knob (preferably Ringfeder)	Yes/No		

Cabin protection (rear)	Trailers stop for cabin protection	Yes/No		
Extra side protection (Option 6)	Solid square bar or rubber blocks	Yes/No		
<b>Tyres and rims</b>		<del>Yes/No</del>		
Minimum tyre dimensions	310/80R22.5 for RORO tractors	proposal		
Design	Specially designed for terminal application to be proposed: 310/80R22.5 Continental Tractor Master or MICHELIN X-TERMINAL 310/80R22.5	Yes/No		
Mudguards	Heavy duty steel mudguards over the rear axle, bolted, including mudflaps	Yes/No		
Wheel nut protection	For front wheels (example in next slide)	Yes/No		
Torque indicators	All wheel nuts must be equipped with torque markers	Yes/No	-	-
<b>Maintenance</b>		<del>Yes/No</del>		
Greasing	Central automatic greasing for the truck (except the 5th wheel)	proposal		

4. MAIN COMPONENTS				
<b>Engine</b>		<del>Yes/No</del>		
Emission regulation	EU Stage 5	Yes/No		
Type	Turbo-charged 4 stroke water diesel engine with direct injection	Yes/No		
Cylinders	To be specified by the Seller	Yes/No		
Output power	min. 170 kW	proposal		
Torque	To be specified by the Seller	proposal		
Radiator	Plate and bar type radiator (tropical grade), mounted on rubber silent blocks	Yes/No		
Expansion tank	Stainless steel grade 316 L or Aluminium Located on the exterior of the cabin without any need to open engine hoods	Yes/No		
Fuel tank capacity	Minimum 300 L	proposal		
Air inlet	Cyclonic filter, frontal inlet with raised air intake	Yes/No		
Silencer	Heavy duty type	Yes/No		
Exhaust system	Heavy duty manufactured from stainless steel 316L	Yes/No		
Engine stop idling	After 5 min	Yes/No		



<b>Transmission</b>				
Model	Allison 3000 series or equivalent, adequately sized	proposal		
Type	Fully automatic with at least four (04) speeds forward and one (01) speed reverse	Yes/No		
Cooling system	Separate oil cooler and a full-flow heavy-duty oil filter	Yes/No		
<b>Fuel saving system (option 9)</b>				
Type	Management system to provide the ideal balance between fuel consumption and performance.	Yes/No		
Average consumption reduction	To be specified by the Seller	Proposal		
<b>Brakes</b>				
Brake system	Full air brake system with split front and rear axles	Yes/No		
Service brakes	Drum or disc brakes, dual-circuit air operated, actuated by a conventional footbrake controller	proposal		
Parking brake	Spring-actuated brake on rear axle	Yes/No		
Brake pressure	To be specified by the Seller	proposal		
Release valve	Independant hand-operated to actuate all tractors brakes and the trailer service line	Yes/No		
<b>Pneumatic system</b>				
Air compressor	Directly driven from the engine system	Yes/No		
Air reservoir	Including air dryer and air cooler ; capacities to be specified by the Bidder	proposal		
Trailer brake connection	2 Line trailer brake system mounted on rear side of the cabin, with yellow and red spiral hoses palm coupling (glad hands) automatic	Yes/No		
Drain valves	Easy access for regular manual draining	Yes/No		
Auxiliary air connection	Provided at the front of the tractor to pressurize the air reservoirs from an external source	Yes/No		
<b>Hydraulic system</b>				
Hydraulic system control	Load sensing control	Yes/No		
Pump	Hydraulic system geared by hydraulic pumps driven by power take-offs mounted on the torque converter	Yes/No		
Pump max capacity	To be specified by the Seller	proposal		

Oil tank capacity	To be specified by the Seller	proposal		
Filter	Full low, return line, replaceable cartridge filters	Yes/No		
Over pressure protection	With relief valves	Yes/No		
Hydraulic lifting cylinders	Two heavy duty double acting arms	Yes/No		
Independant steering system	Double acting steering cylinders, dynamic steering with emergency steering function	Yes/No		
<b>Electrical system</b>				
System voltage	24V	Yes/No		
2 batteries	2x12V / 140 Ah min.	Yes/No		
Isolation switch	Battery isolation switch provided in an accessible outside position	Yes/No		
Alternator	Type to be specified by the Seller	proposal		
Output starter	Power to be specified by the Seller	proposal		
Fuses and relays	Mounted in central electrical box	Yes/No		
Socket 24V	7 core connector (ISO 1185) at rear of the cabin for trailer connection	Yes/No		
CAN-BUS interface	For data transmission and easy fault tracking.	Yes/No		
Diagnostic PC	Supply of a diagnostic PC and transmission of data, with appropriate software and connexion cables	Yes/No		
<b>Ligthings</b>				
Headlamps	LED type	Yes/No		
Rear lights	LED type in rear of the chassis	Yes/No		
Fifth wheel	LED Floodlight mounted onto the rear of the cabin to illuminate the 5th wheel	Yes/No		
Directional indicators	Flashing type, front and rear	Yes/No		
Protection	All external lights shall be recessed into the structure for avoiding impacts	Yes/No		
Rotating warning beacon	LED type	Yes/No		

## 5. OPERATOR CABIN

Design			
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Inner dimensions (length/wide/height)	To be specified by the Seller	proposal		
Type	Air-suspended cabin	Yes/No		
Access	Entrance by side door	Yes/No		
Mounting	3 rubber anti-vibration mounts in combination with shock absorber	Yes/No		
Air-suspended seat	fully adjustable & air suspended	Yes/No		
Swiveling seat	180°	Yes/No		
Cabin tilt	min 45°, electric/hydraulic cabin tilt with hand pump	Yes/No		
Safety leveler	For cab tilting	Yes/No		
Rear view mirror	One extra large wide angle mirror preferably heated ( or parabolic )	Yes/No		
Outside mirrors	2 outside mirrors preferably heated	Yes/No		
Insulation	Provision of an additional tropical roof on the cabin roof as to assist in cabin cooling	Yes/No		
Driver seat	Air suspension and fully adjustable, Rotation with pedals	Yes/No		
Seat belt	3 points	Yes/No		
Storage space	Storage compartment inside cabin	Yes/No		
Head rest	To be included in standard equipment	Yes/No		
Arm rest	Included in standard equipment	Yes/No		
Footrest	Next to the throttle pedal	Yes/No		
Second seat (option 7)	Foldable seat for training purpose with 2pt seat belt	Yes/No		
Ventilation	Ventilation fan inside cabin	Yes/No		
De-misting	Front window	Yes/No		
<b>Air conditioning</b>				
Cabin A/C units to be supplied	Automatic control	proposal		
<b>Windows</b>				
Sliding window driver side	Electric or manual	proposal		
Sliding window lateral side	Electric or manual	proposal		
Wipers and washers	Heavy duty type for front window, with 2 speeds	Yes/No		

Sun visor	At front and rear windows	Yes/No		
<b>GPS system</b>		<del>Yes/No</del>		
Hardware	Preferably in standard equipment	Yes/No		
Accessory socket	12 V	Yes/No		
Installation and cabling	Will be performed by the Seller during onsite commissioning	Yes/No		
<b>Cabin instruments</b>	Following instruments must be supplied by the Seller (not exhasustive list)	<del>Yes/No</del>		
	Revers alarm	Yes/No		
	Hour meter	Yes/No		
	Fuel gauge	Yes/No		
	Engine oil pressure gauge	Yes/No		
	Transmission oil temperature	Yes/No		
	Voltmeter	Yes/No		
	Air pressure gauge	Yes/No		
	Engine coolant temperature gauge	Yes/No		
	Engine oil-pressure warning (light and buzzer)	Yes/No		
	Torque converter oil-temperature gauge	Yes/No		
	Torque converter oil-pressure light	Yes/No		
	Air horn	Yes/No		
	Parking brake indicator	Yes/No		
	King-pin locking indicator	Yes/No		
	king-pin realease from cabin	Yes/No		
	Keyless starting switch	Yes/No		
	Remote engine stop/start system located underneath cabin for service	Yes/No		
	RDT support/bracket + 24 V Power supply (RDT system will be supplied by the Buyer)	Yes/No		
	One ABC powder type fire extinguisher	Yes/No		
<b>Remote Condition Monitoring System</b>	Full remote access of Operator's data (machine hours, indicators, tyres pressures, etc.)	Yes/No		

<b>Fault Diagnostic System</b>	Fault code - Probable cause - Remediation - Trouble shooting action at monitor	Yes/No		
<b>Noise levels inside cabin</b>		<del>Yes/No</del>		
Idle speed	To be specified by the Seller	proposal		
Full speed	To be specified by the Seller	proposal		
<b>Cabin protection (Option 1)</b>		<del>Yes/No</del>		
Extra roof protection/roll cage	Shall meet ROPS criteria ISO 3471 and FOSD criteria ISO 3449	Yes/No		

6. PAINTING, LOGOS AND NAMEPLATES				
<b>Painting and corrosion protection</b>	Surface preparation and shot-blasting: Sa2.5 in accordance with DIN 55928	Yes/No		
	Painting thickness: 3 coats, total 180 microns min for marine environment	Yes/No		
	Frame colors: to be validated during design review	Yes/No		
	All exterior surface coatings shall be of a high durability (>10 years)	Yes/No		
	Yellow/black safety strapping on chassis (front/rear/sides)	Yes/No		
<b>Fleet numbers</b>	Numbers shall be painted on each side of the chassis and on top of the cabin	Yes/No		
<b>Logos and nameplates</b>		Yes/No		
	Buyer's name and logo, to be validated during design review	Yes/No		
	Manufacturer's name and date of manufacture	Yes/No		
	A plate showing main specifications will be installed at a notable location in the operator's cabin.	Yes/No		
	Any danger / warning signs as per local regulations	Yes/No		

7. ACCEPTANCE TESTS				
<b>Testing program</b>	Testing program shall be agreed between both parties and include load test and function tests.	Yes/No		
	Testing shall be conducted at the factory and at the Buyer's terminal.	Yes/No		

	The Buyer reserves the right to appoint third party inspectors and/or supervisors.	Yes/No		
<b>Documentation Submission</b>	The following documentation will be submitted before field testing and commissioning.	<del>Yes/No</del>		
	Test reports and qualification certificates of various materials used for the crane	Yes/No		
	Test reports and qualification certificates of purchased components	Yes/No		
	Qualification certificates of welds	Yes/No		
	Qualification reports of assembly quality	Yes/No		
	Painting qualification certificates	Yes/No		
<b>Acceptance Report</b>	After all above tests have all been successfully completed and passed an acceptance report will be prepared and the tests results and conclusion will be listed.	Yes/No		

8. DOCUMENTATION				
<b>Technical Documents</b>	All documentation shall be provided in hard and soft copies	Yes/No		
	2 Driver Operator's Manual in Greek	Yes/No		
	2 Electrical Circuit Diagrams with legends in English & Greek	Yes/No		
	2 Hydraulic Circuit Diagrams with legends in English & Greek	Yes/No		
	2 Detailed drawings with legends in English & Greek	Yes/No		
<b>Maintenance Manual</b>	2 copies in English & Greek	<del>Yes/No</del>		
	Detailed maintenance plan including procedures, spare parts, schedule	Yes/No		
	Procedure of assembly and disassembly of main components	Yes/No		
	Engine and transmission maintenance manuals	Yes/No		
	List of alarms and faults codes with associated procedure	Yes/No		
	Lubrication charts	Yes/No		
	Detailed list of spare parts with references	Yes/No		
	Manual for quickly worn-out parts and spare parts, including name, size, quantity, material, special requirement and shop drawings of the parts;	Yes/No		

9. AFTER SALE SERVICES				
<b>Training</b>		<del>Yes/No</del>		
Language	English or Greek	Yes/No		
Training supports	Operation and Maintenance Training Manuals in hard and soft copies in Greek language	Yes/No		
Location	On the Terminal facilities	Yes/No		
Program	Training sessions shall include 2 groups for the maintenance staff (5 days each minimum, 5 persons per group) and 1 session for the operators (5 days minimum, 5 persons per group)	Yes/No		
<b>Agency/representation in Greece</b>		<del>Yes/No</del>		
	Name of local agent	proposal		
	Location of local agent near Thessaloniki	proposal		
	Stock of spare parts in Greece	Yes/No		

10. LIST OF AUTHORIZED SUPPLIERS		PROPOSAL	COUNTRY OF ORIGIN	
Engine	VOLVO, CUMMINS, MERCEDES MTU	proposal	Country of origin	
Transmission	Allison, ZF, DANA	proposal	Country of origin	
Axles	SISU, KESSLER, TERBERG, VOLVO, KALMAR	proposal	Country of origin	
5th wheel	Jost k21012, Sisu, Terberg, Holland/Eurohitch FW3510	proposal	Country of origin	
Steering	DANFOSS or equivalent	proposal	Country of origin	
Other hydraulic components	Atos, Parker, Rexroth, Vickers	proposal	Country of origin	
Tyres	CONTINENTAL, MICHELIN, BRIDGESTONE, GOODYEAR	proposal	Country of origin	

ANNEX 3 - PRICE SCHEDULE					
Tender Ref.	Date of issue of Bid	Date of Bid			
	Project	THPA, Thessaloniki, Greece			
	Bidder	Name			
ITEM	QUANTITY	DESCRIPTION	PRICE PER UNIT	TOTAL PRICE	COMMENTS
Terminal Tractors	2	Design, manufacture, tests at the Seller's Premises of the tractors		-	
Shipment	2	Seaborne transportation from Seller's Premises to the Buyer's terminal		-	
Supply made in Thessaloniki	2	Offloading from ship or barge, erection at the Buyer's terminal if any, tests at the Buyer's terminal, commissioning of the tractors		-	
Training	1	Training of Buyer		-	
Certification	2	Compliance with Greek regulation, import licenses, required authorization and license plates		-	
Option 1	2	Cabin protection cage		-	
Option 2	1	Set of critical spare parts		-	
Option 3	1	Set of consumables and filter kits		-	



Option 4	2	Extra bars protection		-	
Option 5	2	Second seat for trainer		-	
Option 6	2	Fuel saving system		-	
<b>Unit Price and Purchase Price</b>			-	-	



ANNEX 4 - WARRANTY				
Tender Ref.	Date of issue of Bid	Date of Bid		
	Project	THPA, Thessaloniki, Greece		
	Bidder	Name		
ITEM		WARRANTY PERIOD	COMPLIANCE	DEVIATIONS if any
General	General	2 years minimum for all components or 6,000 hours	Yes/No	
Mechanical components	Structure & chassis	7 years	Yes/No	
	Paintwork & galvanizing	7 years, De gree of rusting Ri3 per ISO 4628-1:3	Yes/No	
	Engine & Transmission	2 years	Yes/No	



ANNEX 5 - SPARE PARTS								
Tender Ref.	Date of issue of Bid	Date of Bid						
	Project	THPA, Thessaloniki, Greece						
	Bidder	Name						
ITEM	REF.	BRAND	Availability/Delivery time EXW	WARRANTY	LIFE TIME	UNIT PRICE	QUANTITY	TOTAL
<b>Cabin</b>								
door handle							1	
door lock							1	
shock absorber							1	
cabin ballon							1	
Seat belt							1	
Seat covers							1	



Air compressor unit							1	
<b>Wiper set</b>								
wiper blade							1	
wiper arm							1	
wiper motor							1	
<b>Tilt System</b>								
cabin pump							1	
cabin cylinder							1	
<b>Hoses</b>								
Waterhose							1	
<b>Dashboard</b>								
combi switch							1	
contact switch							1	
accelerator pedal							1	
Brake valve							1	
Handbrake valve							1	
Flasher unit							1	
Relay							1	
<b>Lights</b>								
Headlight (left side)							1	
Headlight (right side)							1	
Tail light							1	

reversing light							1	
<b>Front axle</b>								
Complete wheel							2	
Wheel nut							12	
wheel bolt							12	
Brake shoe							2	
Brake cylinder							1	
Slackadjuster							1	
Tension spring							1	
Seal ring							1	
<b>Rear axle</b>								
Wheel nut							12	
wheel bolt							12	
Brake shoe							2	
Brake cylinder							1	
Slackadjuster							1	
Tension spring							1	
Seal ring							1	
<b>Engine</b>								
Injector							1	
Turbocharger							1	
Coolant pump							1	
Engine valve							1	
Temperature sensor							1	
<b>Transmission</b>								
Gear selector							1	

Level sensor							1	
Temperature sensor							1	
<b>Steering system</b>								
Orbitrol							1	
Hydraulic pump							1	
<b>Other</b>								
Main switch							1	
Alternator							1	
Fuse kit							1	
Nipple kit							1	
Tail pipe							1	
Tank cap							1	
Radiator							1	
Radiator cap							1	
<b>Total Price</b>								<b>0,00 USD</b>

ANNEX 6 - CONSUMABLES									
Tender Ref.	Date of issue of Bid	Date of Bid							
	Project	THPA, Thessaloniki, Greece							
	Bidder	Name							
ITEM	REF.	BRAND	Availability/Delivery time EXW	UNIT PRICE	QTY	TOTAL PRICE	Service interval (every 1000hours)	COMMENTS	
filters	Engine Oil Filter				4				
	Main Fuel Filter				4				
	Fuel Filter Cartridge				4				
	Gearbox oil Filter				1				
	Air Filter				2				
	Power Core Filter				2				
	Hydraulic Filter				1				
	Air Dryer Filter				1				
	A/C cab Filter				1				
	Other filter kit				1				
lubricants	Engine oil				for first revision				Price per L
	Gearbox oil				for first revision				Price per L
	Gear oil				for first revision				Price per L
	Hydraulic oil				for first revision				Price per L



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	Axle oil					for first revision			Price per L
	Grease					for first revision			Price per kg
	Engine coolant					for first revision			Price per L
others, per OEM recommendations	Tyres					2			
	<b>Total Price</b>								