

**HEDNO S.A.  
SPECIFICATION**

**SMALL SIZED 4X2 AND 4X4 DISTRIBUTION LINE  
DIESEL BUCKET TRUCK**

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Metering Branch**

**Network Department**

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DIESEL BUCKET TRUCK****CONTENTS**

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## **SMALL SIZED, 4X2 AND 4X4 DISTRIBUTION LINE DIESEL BUCKET TRUCK**

### **1. SCOPE:**

This specification defines the requirements for the supply of 2- or 4-wheel drive Distribution line diesel bucket trucks with a working height of 15 m. Bucket truck means a combination of a vehicle and a superstructure. The superstructure includes the truck body, the insulating boom, the insulating bucket, the stabilizers and the devices and the operation and control instruments of the superstructure.

### **2. KEY WORDS**

Line bucket truck, 4X2 wheel drive, 4X4 wheel drive, Insulating boom, Insulating bucket, 22 kV.

### **3. OPERATING CONDITIONS**

#### **3.1. ENVIRONMENT CONDITIONS**

The vehicles of the description are intended for use by various Units of the Corporation throughout Greece, under the following environment conditions:

- a) Minimum annual temperature: -25 °C
- b) Maximum annual temperature: +45 °C  
with an average value over a period of 24 hours that shall not exceed: +35 °C
- c) Humidity: 20% to 96%
- d) Road Network: Paved roads, dirt roads

#### **3.2. MEDIUM VOLTAGE (MV) AND LOW VOLTAGE SYSTEM PROPERTIES**

##### **3.2.1. 3.2 MV system properties**

Medium voltage networks are three-phase, three-wire with a grounded neutral node only at the departure end, either directly or through resistance, which limits the earth fault current at 1000 A, with the following properties:

|                                     |        |         |        |        |
|-------------------------------------|--------|---------|--------|--------|
| Nominal system voltage Un:          | 6.6 kV | 15 kV   | 20 kV  | 22 kV  |
| Maximum system voltage Um:          | 7.2 kV | 17.5 kV | 24 kV  | 24 kV  |
| Frequency:                          | 50 Hz  | 50 Hz   | 50 Hz  | 50 Hz  |
| Short-circuit power:                | 150    | 250     | 250    | 500    |
|                                     | MVA    | MVA     | MVA    | MVA    |
| Impulse withstand voltage 1.2/50μs: | 60 kV  | 95 kV   | 125 kV | 125 kV |

##### **3.2.2. LV system properties**

LV networks are three-phase, with a 50 Hz frequency and a nominal phase-to-phase voltage of 400 V with a directly grounded, neutral wire.

### **4. REGULATIONS - SPECIFICATIONS**

The bucket truck (vehicle and superstructure) must comply with the requirements of the Highway Code (KOK) and the regulations regarding exhaust and noise emissions; it shall comply with the following, regulations, as last in force, regarding the technical description, it shall bear the CE marking and

shall fully comply with the provisions of the Greek Law and the European Union (EU) Regulations.

During the preparation of this description, elements from the following standards were taken into account:

- EN 61057:1995 " Aerial devices with insulating boom used for live working"
- ANSI/SAIA A92.2-2015 "Vehicle-Mounted Elevating and Rotating Aerial Devices"
- EN 280:2013+A1:2015 : "Mobile elevating work platforms – Design calculations – Stability criteria – Construction – Safety – Examinations and tests"

The requirements of this description shall prevail if they are in conflict with the requirements of the above standards.

## **5. DESCRIPTION**

### **5.1. FRAME, DRIVING CAB AND TRUCK BODY FEATURES**

#### **5.1.1. Frame and chassis**

A skeleton-type frame made of steel, sturdily built, able to withstand the difficult and special working conditions under which it shall be used by HEDNO. Heavy construction chassis, with a capacity to fit an Elevating Mechanism and with high resilience to local charge.

Front and rear towing hooks with a securing device.

#### **5.1.2. Driving cab**

The cab shall have the following features and elements:

- Forward or semi-forward type, high-strength and all metal cab, with excellent frontal and side impact features, insulated roof against heat and noise and with a wide visual field to all directions (minimum required 145°-arc from the driver seat).
- Ergonomically designed driver seat, with excellent lateral support, fully adjustable forward-backward as well as in terms of height, for ultimate driving comfort. Lining material should be wear-resistant and washable.
- Seats for at least 2 persons, including the driver.
- 3-point safety belts for all occupants.
- Air-based heating system, with natural and artificial (with an electric fan) circulation, with temperature controls and air provision rate from the air supply outlets towards the driving cab and the windscreen. Heating system, cooling system for the driving cab (AIR CONDITION) and ventilation system with adequate performance in order to secure a pleasant internal temperature, regardless of the external conditions.
- Two doors, one on each side of the driving cab.
- Doors equipped with electric security locks, which can be opened with remote control. All glass panes shall be made out of safety glass (Triplex or Securite) and anti-glare (tinted). Door glass panes shall be remotely controlled and with an adjustable opening.  
(The front windscreen shall be laminated, while the rear shall have anti-glare protection for excellent reverse visibility).
- At least two rotating sun visors for the windscreen.
- Two wipers of at least two speeds and with an intermittent setting, as well as a windscreen washer system.
- The vehicle shall have one internal and five external heated driving mirrors, which shall be controlled from the driver seat.
  - One mirror on the left,
  - One mirror on the right,
  - One wide-angle mirror on the right,
  - One volume mirror on the right with a vertical optical angle

- And one mirror on the front right to control the forward vertical optical angle.
- At least two ashtrays.
- A backup camera.
- An installed radio - CD or USB player with a sound system.
- A backup buzzer.
- A roof beacon (in accordance with HEDNO specifications)
- All the necessary equipment in accordance with the Highway Code.

### **5.1.3. Truck body**

A high-strength truck body, installed on a strong steel frame, able to bear, in cooperation with the vehicle frame, the equipment described in Paragraph 5.7. The truck body shall have two side walls and two cabinets (one on each side of the vehicle) for tools and materials. The cabinets shall have external doors with door knobs and security locks. Their interior shall include metal drawers with an outward cornice of at least 20 mm height for holding the materials. The depth of the cabinets shall be at least 400 mm, while the total facade surface shall be at least 2 m<sup>2</sup> and their volume at least 0.5 m<sup>3</sup> on each side of the vehicle.

The volume of the cabinets of each side shall be divided in 3 or 4 compartments, which shall be accessed from the external doors of the facade.

On the inside, each cabinet shall have 3 shelves. Out of these selves, only the top one shall be a continuous self across the length of the facade and shall be used for the storage and transport of long-length materials or tools (e.g. insulating rods).

On the back side of each cabinet row, an external door with a security lock shall be placed only for the top shelf, in order to facilitate the placement and receipt of materials or tools.

The external surface of the top of the cabinets shall be covered with a slip-resistant steel sheet with a minimum thickness of 3 mm. At the responsibility of its manufacturer, the distance of the truck body floor from the ground shall be the minimum possible, in order to facilitate the loading and unloading of the vehicle.

The vehicle shall have horizontal bars between the axes for side impact protection.

## **5.2. ENGINE PROPERTIES**

- A 4-stroke diesel engine, with 4 or 6 cylinders, water cooled.
- Meeting the pollutant and noise emission thresholds (directive 1999/96/EC and its subsequent versions), in accordance with the European directives on anti-pollution technology, as applicable at the time of the delivery of the vehicle, but at least EURO VI.
- With Turbocharger or Supercharger and Intercooler.
- Minimum engine power 107 kW (145 HP) in accordance with EEC in similar revolutions (in accordance with directive 1999/99 of the EU and its subsequent versions).
- Minimum torque 360 Nm in accordance with EEC, with as much flat characteristics as possible in the relevant revolutions.

## **5.3. TRANSMISSION SYSTEM PROPERTIES**

### **5.3.1. 4X2 transmission system:**

- Mechanical gear-box with at least five (5) fully synchronized forward gears and at least one reverse gear.
- A limited slip differential system with an operation indicator which shall be controlled from the driver seat.
- Rear-wheel drive.

- 4X2 drive wheels with radial tires, suitable for both paved and dirt road network. Single front wheels, double rear wheels.
- Radial tires, tubeless according to ETRTO and directive 2001/43/EC (GG B589/30-9-1992) which shall bear the (E) approval mark.
- With a manufacturing date no older than 6 months from the date of award to the Supplier and a speed rating (index) in accordance with the Highway Code specifications for On-Track Machines vehicles.

#### **5.3.2. 4X4 transmission system:**

- Mechanical gearbox with at least six (6) fully synchronized forward gears and at least one reverse gear.
- An auxiliary gearbox (transfer case) with two gears.
- The vehicle shall have two driving axles with the relevant differentials, as well as a central differential.
- All differentials shall be equipped with a differential suspension system ("limited slip" function), which shall be controlled from the driver seat (Differential Lock – LSD).
- Any jam of the "limited slip" function in the differentials shall be displayed on the dashboard of the vehicle with a light indicator.
- All the vehicle wheels shall have semi-tractor tires, suitable for movement on the paved and dirt Road Network.
- The tires shall be radial and tubeless according to ETRTO and directive 2001/43/EC (GG B 589/30-9-1992) and they shall bear the (E) approval mark.
- In addition, their manufacturing date shall be no older than 6 months from the date of the award to the Supplier and their speed rating (index) in accordance with the Highway Code specifications for On-Track Machines vehicles.

#### **5.3.3. Power take-off (PTO):**

One for the high-pressure pump of the hydraulic system of the equipment (par. 5.7.3).

### **5.4. STEERING SYSTEM, BRAKING SYSTEM PROPERTIES**

#### **5.4.1. Steering system:**

Two steering wheels on the front. A steering system with a hydraulic or electric assistance. Driver seat on the left part of the Cabin.

#### **5.4.2. Braking system:**

Dual circuit brake system, hydraulic or with compressed air in all the wheels, with a supporting device and pressure regulator, ensuring adequate braking with a full load and anti-lock braking system (ABS with EBD). Mechanical parking brake (handbrake) on the rear wheels.

Engine break for blocking exhaust gas on the engine exhaust.

Lane Departure Warning System.

### **5.5. ELECTRICAL SYSTEM PROPERTIES, CONTROL INSTRUMENTS**

#### **5.5.1. Electrical system:**

Suitable for the operation, circulation and safe driving of the car in accordance with the EU regulations and the Greek Law.

- 12 or 24 V electrical system voltage.
- Batteries according to the European Standard EN50342:2006 "Lead-acid starter batteries".
- Internal lighting of the cabin: At least two lighting fixtures in the driving cab.
- Two high-brightness lighting fixtures, preferably with Led technology, in the loading area controlled by the driver.

- Socket outlet for connecting portable lights (extension cord), 230V voltage.
- Alarm lights.
- Headlights, rear headlights and other lights according to the Highway Code.
- Fog lights in the Standard Equipment.
- Horn.
- Siren.
- Backup buzzer.
- Orange rotating emergency Led-type beacon, controlled by the driver, with at least 500 Lumens brightness.

#### **5.5.2. Control instruments:**

In accordance with the EU regulations and the Greek Law and as a minimum, the following must be present:

- Engine speedometer/ tachometer.
- Smart digital tachograph, in accordance with the applicable European guidelines as well as a speed limiter.
- Fuel-quantity indicators with an indicating light for low fuel levels.
- Engine coolant temperature indicator.
- Oil pressure indicator.
- Indication of hours of operation of the engine and of the superstructure.
- Light indicator for battery level, handbrake engagement, low engine-oil pressure, power steering fluid level, ABS/ESP function
- In addition, light indicators: One touch-light for headlights, One touch-light to change headlights, One touch-light for emergency lights.
- Light indicator for a braking-system fault.

### **5.6. DIMENSIONS-WEIGHTS-OPERATING FIGURES**

**Dimensions and weights:** Give the maximum permissible weights per axle and in total, the permissible payload which must be at least 300 kg in running order in addition to its superstructure, as well as the exact dimensions of the vehicle and the vehicle with its superstructure.

#### **5.6.1. Maximum Total Dimensions of the Vehicle (with complete Superstructure and Bucket):**

- Total Length: 6.5 m
- Total Width: 2.2 m with the exterior mirrors folded.
- Turning radius: from wall to wall 14m and from pavement to pavement 12.5m.

The superstructure may protrude in front or behind the frame of the vehicle, according to the provisions of the Highway Code.

#### **5.6.2. Minimum gross vehicle weight (GVW) kg:**

The gross weight of the vehicle should be 3,500 kgr at least (Vehicle Category N1), so that along with its reliance on the stabilizers, safe work can be achieved in all positions of the boom.

#### **5.6.3. Fuel tank:**

Fuel capacity of at least 70lt. With cap and security lock.

#### **5.6.4. Lift capacity:**

At least 10% with all its equipment and with a full load.

#### **5.6.5. Speed:**

Final speed 80 km/h at least and up to the legal operating threshold for On-Track Machines, according to the applicable Highway Code.

### **5.7. TECHNICAL CHARACTERISTICS OF ELEVATING WORK PLATFORM**

In accordance with the latest regulations EN 61057 or ANSI A92.2 (at least Category C).

### **5.7.1. Boom:**

Fully insulated, with dielectric strength, suitable for work at 22kV voltage. Articulating overcenter or articulating and telescopic boom consisting of 2 or 3 sections with the ability to move in all directions. The boom drive system shall be hydraulic with at least one high pressure (see par. 5.7.3). All movements (rotation, lift-descent, telescopic movement) can be performed simultaneously. The boom rotation shall be performed via a suitable mechanism (e.g. gearbox with wormgear-type bolt) in order to achieve a stable and smooth rotation. The boom shall be able to rotate by at least 700°.

Adequate boom length so that, in a 2 meter load radius (bucket), the floor of the bucket shall be at least 12.50 m away from the ground (working height 15 m).

The end of the boom shall be from insulating material with dielectric strength suitable for live working on the overhead MV networks. (par. 3.2) using special insulating work rods at Medium Voltage, for pruning trees near overhead MV power networks etc.

In the event of a sudden increase in the wind speed during works, it should be possible for the bucket to return to its position at forces up to 6 Beaufort.

### **5.7.2. Work bucket**

One (1) suspended or supported on the end of the boom. Buckets shall be made out of insulating material (e.g. EPOXIGLASS).

Both the buckets and the controls on it shall be fully insulating, with dielectric strength, suitable for live work at 22kV voltage.

The suspension or support system shall achieve, at every position of the boom, in a mechanic or hydraulic manner, the safe leveling of the buckets' floor.

Each bucket shall have belts and suspension devices equal to the number of the persons on board.

The bucket must have space for the employees and their individual tools and be allowed to bear a nominal weight of at least 220 kg at any position of the boom.

The actual permitted load of the bucket should be stated, along with the ultimate strength.

In case of exceeding the permissible load, there should be a safety device with a relevant marking, which shall prevent any handling.

Bucket liner from PVC or polyethylene.

Each bucket shall be equipped with a canopy and shall have an entry and exit step, on the outside. The embarkation on and disembarkation from the bucket should be done from a position at ground level.

The work bucket should be able to rotate +/- 90° to the vertical axis.

### **Bucket dimensions:**

Minimum base surface: 0.6 m<sup>2</sup>

Wall height over 1.1 m and less than 1.20 m.

### **5.7.3. High-pressure pumps for boom movement:**

The hydraulic system can be powered electively, in alteration, by two high-pressure pumps:

- Motor pump: Driven by the power take-off (PTO).
- Electric pump: With an electric engine, powered by the battery pack of the vehicle, to be used in emergencies and in case of fault of the vehicle engine. This pump shall be used for the buckets' return at their initial starting position. In the event of fault of the electrical system or discharge of the batteries, the work buckets must, via a manual operation of the hydraulic oil return valve in the oil tank, be able to descend to a height that will allow the technicians to exit safely.
- Each of the pumps shall have adequate power to cover the full charge of the boom hydraulic system.



- The driving cab should include an indicator light and a buzzer on the cabin controls when arming the high-pressure pump to prevent the vehicle from moving with the pump armed.

#### **5.7.4. Boom operation and control instruments:**

For the operation and control of the boom electrification system (batteries, electric engine, controller etc.), there shall be at least the following elements and instruments:

- A switch, fuses.
- Automatic electric engine switch.

In addition, it is desirable to have a latch mechanism, which would preclude the activation of the boom electrification, if the boom is already in operation.

#### **5.7.5. Boom controllers:**

Two complete controllers, one at the base of the boom and one in the work buckets. Each controller should be able to ensure all the boom movements, both through the motor pump and the electric pump.

The controller in the bucket must be configured in such a manner, as to prevent any unintentional handling of the boom.

The selection of the boom operation from the upper or lower controller shall be done by a controller selector located at the base of the boom. Simultaneous operation should be excluded.

In case of inability to perform operations from the bucket, due to an accident or momentary illness of the technician, it must be possible to perform the required operations from the controller at the base of the boom. Similarly, in the event of an emergency, there should be an "emergency stop" function.

#### **5.7.6. Hydraulic tools:**

From the work position at the bucket, it should be able to connect hydraulic tools (e.g. presses, chainsaw etc.) to suitable quick couplings, located at the end of pipes for performing various works.

The type and the dimensions of the quick couplings should be those that are usually found in the EU.

#### **5.7.7. Stabilizers:**

Two pairs, fully hydraulic with appropriately insulated stabilizers for fixed support of the vehicle, with a vertical extension or telescopic.

An independent controller for each stabilizer is desirable.

A safety device that won't allow the vehicle to move if the stabilizers have not fully folded.

#### **5.7.8. Mechanical endurance - Stability - Rollover safety:**

The loads applied for the calculation of the above shall be calculated according to EN 280. The vehicle is stable if it can carry the stipulated loads at an inclination of 0.5° beyond the permissible inclination to the horizontal without a rollover.

The manufacturer should indicate the maximum permissible inclination of the vehicle to the horizontal and the maximum permissible gradient where the bucket truck (vehicle and superstructure) can operate in accordance with paragraph 5.3.6, EN 280. This gradient should be at least 5% at minimum stability steering. The vehicle shall have a safety device that shall update the operator if the vehicle inclination is within the limits of permissible inclination indicated by the manufacturer of the bucket truck and which shall be visible from every controller of the stabilizers.

#### **5.7.9. Safety devices:**

According to regulation EN 280 and Presidential Decree 57/2010 "Adjustment of the Greek Law to directive 2006/42/EC of the European Parliament and of the

Council "on machinery, and amending Directive 95/16/ECEK" and abolishment of the Presidential Decree 18/1996 and 377/1993", Presidential Decree 395/94 and Presidential Decree 89/99 on minimum safety and health specifications for the use of work equipment by employees during their work and decision No. 15085/593(GG 1186/B/25.8.03) on control regulation of lifting appliances and the provisions of the Greek Law and EU regulations applicable at the time of delivery. The vehicle shall bear the CE marking. It shall be in compliance with regulation EN 61057 or ANSI A92.2.

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### **5.8. COLOURING**

All metal parts of the vehicle must be properly treated to protect them from oxidation. The frame and the superstructure (internal and external surfaces) must be coated with a high-quality colour in the shade blue RAL 5013.

The Supplier, in their bid, should also indicate the total thickness of the colour and describe all the stages of the painting treatment.

### **5.9. GENERAL TERMS**

#### **5.9.1 Guarantees**

1. The bucket truck (vehicle and superstructure) must be new, constructed in the last 6 months before the award of the last vehicle described in the Notice.

2. The supplier must have placed on the market at least twice the number of vehicles and superstructures similar to the type required by the Notice, which must operate successfully.

To allow the evaluation committee to deliver a comprehensive opinion, the bidder is obliged to produce before the evaluation committee, a vehicle with a similar superstructure and operation positions, which will be able to stay there for a least 24 hours; otherwise, at its expense, it shall transfer two members of the committee to another organization that has procured a bucket truck with a similar superstructure, in order for the committee to control the mechanism, the operation positions and the controllers in accordance with the specifications, in order to decide the continuation of the tender for the participant.

The supplier is obliged to deliver the bucket truck registered with its license plates. It shall be equipped with all the necessary safe operation measures, as described in the Technical Bid and shall fully meet the requirements provided by law for:

- Electromagnetic compatibility in accordance with the applicable latest European Guideline).
- Machine Safety – CE Marking in accordance with Presidential Decree 57/2010 (GG 97τ A' /26-06-2010) or a newer version thereof.

The bucket truck shall be delivered in fully operational mode to the authorized representative of the buyer from the supplier or a representative thereof. All the expenses for commissioning the bucket truck and its equipment shall be borne by the supplier.

The supplier is obliged, before delivering the bucket truck, to produce a copy of the approval by the competent Ministry regarding its use with full equipment and its circulation on public roads.

3. Together with their bid, the Supplier shall also submit the following:

- Documents, catalogues, leaflets, pictures with detailed information regarding the construction, operation, maintenance and capacities of the vehicle and its equipment.
- A drawing of the general dimensions of the vehicle and the equipment. A study on load distribution and vehicle stability with equipment.
- Drawings of the equipment.

4. The bucket truck shall be covered by a good operation guarantee with a declared duration of at least three (3) years.

Said guarantee shall cover the entire vehicle, including the superstructure and any additional equipment/components that may be required. More specifically:

- Bodywork painting/ Superstructure: Duration of at least 5 years. The manufacturer shall be obliged to submit a detailed description of the Stages of Processing/Bodywork and Superstructure Painting.
- Rust Protection: At least 10 years for all parts (a detailed description of the Technology used and of the Protection Methods is required).
- Engine: Duration of at least five (5) years or 160,000 km, whichever happens first

Moreover, it must be clearly stated in the bid that, under the care and at the expense of the supplier, at least one inspection and maintenance of the vehicle and equipment shall be performed after a period of operation to be determined by the supplier. Said inspection and maintenance shall be performed for each bucket truck at the capital of the Prefecture of the geographical area where the buyer uses said vehicle.

Finally, within the time period of the good operation guarantee declared by the supplier, the supplier is obliged to repair, without charge to the buyer (covering work and spare parts), any damage (vehicle and equipment) with its crew going to the capital of the Prefecture where the vehicle is, as long as the damage did not result from improper handling.

**5.** In order to ensure the increased and unobstructed availability of bucket trucks, which are necessary for carrying out construction, maintenance and repair works in MV and LV Distribution networks, which require immediate and rapid actions, the supplier, whether it's a Company or a Joint Venture, on the date of the bid submission, must have in Greece a privately owned workshop for general repairs of the offered type of vehicle and equipment as well as a warehouse for the required spare parts. The information and addresses of the above facilities must be disclosed in the technical bid. Additionally, the repair and maintenance of the vehicles and equipment must be performed by privately-owned or authorized workshops. It is necessary to have at least one privately-owned or authorized workshop in every Region of the Country. In the event where the repair and maintenance of vehicles and equipment is done in authorized workshops, the supplier shall submit solemn declarations by said workshops regarding the acceptance of all the terms of the notice regarding repair - maintenance and duration of guarantees.

**6.** The supplier and its representative undertake to have any spare part requested by the corporation, for the vehicle and its equipment, within five working days in the first three years after delivery, while for the next seven years within ten (10) working days, from the date of their request.

**7.** Regarding the offered bucket truck or separately for the vehicle and the superstructure, the supplier's representative shall submit a statement with the following:

- User certificates.
- Sales catalogues in combination however with user certificates
- Any other piece of evidence regarding sales and the satisfactory qualitative behaviour of the bucket trucks.
- The number of bucket trucks or vehicles or superstructures that are the same as those provided by the manufacturer.

**8.** In the event that a mechanical or other problem occurs in a bucket truck which cannot be remedied in the supplier's workshops in Greece, the representative and the supplier undertake to bring specialized personnel who will solve the problem within 15 days from its written notification.

During the guarantee, the above costs shall be borne by the supplier and after its expiration the costs shall be borne by the buyer provided that the problem shall not be due to a design deficiency.

**9.** The manufacturing and testing of the bucket truck and all its equipment must be in compliance with regulations EN 61057 or ANSI A92.2 and regulation EN 280.

The bid shall be accompanied by copies of the certificates of the following tests:

- The tests of paragraph 5.4.2 of ANSI A92.2 or the tests of paragraphs 8.5 and 8.6 of EN 61057, for the offered type of the lifting work platform (insulating boom, insulating buckets and their liners).
- The tests of paragraphs 6.1.4.2.1, 6.1.4.3 and 6.1.4.4 of EN 280 for the offered or similar type of bucket truck (frame and superstructure) as well as a CE certificate.

**10.** If the contract includes more than one vehicle, the Supplier shall build a complete sample in accordance with the special terms of the notice, which shall be submitted to HEDNO for examination, comments and modifications by its competent services. This is deemed necessary as this vehicle may not be a standardized construction of a Company but include superstructures with equipment by different Companies.

Following the approval of the vehicle, the Supplier shall proceed with the construction of the other vehicles of the Contract.

The manufacturer is obliged during the construction of the sample, before proceeding to each new work stage, to call the competent inspector of HEDNO for control and approval of the previous stage (e.g. materials, dimensions of structures and dimensions of sheets, surface treatment, paint layers, seat construction, etc.).

The HEDNO inspector reserves the right to inspect the construction of other vehicles at any stage.

In case of deviations from the specification in materials, dimensions, quality of work, etc., the manufacturer is obliged to correct them at its own expense immediately.

**11.** All materials shall be new, unused and of excellent quality. The work shall be flawless and in accordance with the rules of the technology.

Poor craftsmanship and defects shall be rejected. The finish of all constructions shall be flawless and tasteful. All weld seams shall be uniform and polished. The joints and the selvages of the inner liners of the cabin shall have the appropriate and tasteful covers.

Any burrs and other abnormalities shall be rejected.

### **5.9.2. Components – Spare parts – Special Tools**

**1.** Each vehicle shall be accompanied by the following tools and components, the value of which must be included in the bid:

- Two (2) safety seat belts.
- Full spare wheel, affixed to an appropriate area of the vehicle.
- Complete set of maintenance tools for the main vehicle and equipment, as well as the tools necessary for changing the wheel.
- Lubricating apparatus (grease gun).
- Any other component or apparatus necessary for the smooth operation of the vehicle and the equipment.
- Triangle reflective warning sign.
- Portable car fire extinguisher 1.5 kg. The fire extinguisher shall be affixed to the bucket truck compartment, so that it will not disturb the occupants, while at the same time it will be easily accessible in case of emergency.
- Portable car pharmacy.
- Stickers with the HEDNO logo.

All of the above shall be delivered in a box, with the contents of the materials affixed on it, except for the fire extinguisher and the logos that will be affixed, in consultation with HEDNO, to the bucket truck.

At the responsibility of the manufacturer, a position of final and secure fastening of the provided tools shall be stipulated, for the placement of the spare wheel.

**2.** There is no stipulation for the provision of spare parts and special tools.

**3.** The supplier shall deliver a list of all the special repair tools (complete set) of the above vehicles. Their prices shall be included only in the financial bid and shall NOT be taken into account during the financial evaluation of the bids.

### **5.9.3. Manuals**

When delivering the vehicles, the supplier must also deliver the following manuals in printed and digital format (CD):

1. Operation and maintenance manual for the vehicle and the lifting platform, which must be in the Greek language: one (1) for each bucket truck and four (4) additional. This manual should be delivered in printed and digital format (CD).

2. Two (2) SETS of workshop manuals for the vehicle and the lifting platform in the English language.

3. Two (2) spare-parts catalogues for the vehicle and the lifting platform in the English language.

Note: A decoder must be delivered, if it is required, for using the spare-part catalogue. Slides shall also be accepted instead of spare-parts catalogues, provided that at least one complete set of spare parts catalogues is provided.

4. Two (2) Flat Rate Manuals for the vehicle and the lifting platform by the Manufacturer.

### **5.9.4 TRAINING**

1. The supplier shall undertake, at no cost to the Buyer, the training at its dealership in Greece:

- Of the drivers- operators of the vehicles -equal to the number of vehicles- regarding the operation and maintenance (operator level) of the vehicle and its superstructure.
- Of a group (e.g. of 10 persons) of technicians regarding issues of repair and maintenance of the vehicle and its superstructure and regarding issues of spare-parts care.

It shall also undertake the training of 2 technicians of the Buyer regarding repair issues and special issues of technology at the manufacturing Factory, covering all travel, accommodation, training and return etc. costs.

2. The training programs are set for at least one (1) day for the training of operators in the use of the frame and the superstructure and for at least two (2) days for the training of technicians in the maintenance and repair of the frame and the superstructure. The dates of training shall be set jointly with the contractor following an agreement of both parties. The Supplier shall submit a time schedule of the training program, as well as a list with the training manuals.

## **6. TESTS - CHECKS**

Upon receipt and in the presence of the buyer's inspector, the following tests shall be performed at the seller's factory on each bucket truck (unless otherwise stipulated later):

1. Tests of paragraphs 6.1.4.2.1, 6.1.4.3 and 6.1.4.4 of EN 280. In particular, the test of paragraph 6.1.4.2.1 shall be performed in 5% of the received vehicles (rounded to the highest integer).

2. Optical inspection for any defects and/or problems presented after the tests of paragraph 1 of this Article.

3. The tests of paragraph 5.4.2, ANSI A92.2 or of paragraphs 8.5 and 8.6, EN 61057, for the offered type of lifting work platform (boom, bucket, liner).

4. Acoustic emission test according to EN 61057.

The costs of the tests shall be borne by the supplier.

## **7. NAMEPLATES - MARKING**

1. On the inside of the windscreen of each vehicle, a form shall be placed in DUPLICATES including the following information:

- Frame No.
- No. of engine, type, Manufacturer

- Type, Manufacturer of the Clutch
- » » Gear Box
- » » Ignition
- » » Alternator
- » » Battery
- » » Oil Pump
- » » Oil Filter
- Superstructure No.

**2.** Each vehicle shall be marked on the windscreen with a serial number (1,2, ..... etc.) which shall also be written in a prominent place on the above form.

**3.** The operating instructions and hazard signs that are to be placed in visible parts of the vehicle and the superstructure as well as the CE mark, shall all be translated into Greek and printed on indelible signs of high resistance to weather exposure. These plates shall be permanently affixed to the appropriate places.

In any case, the instructions for use and the marking of the superstructure shall be in accordance with the requirements of EN 280.

## 8. ANNEXES

### ANNEX A

#### INFORMATION SUBMITTED WITH THE BID

1. Table of technical characteristics prepared in accordance with attached Annex B.

2. Detailed drawing of the offered bucket truck with dimensions in millimeters, a brochure of features and a detailed technical description of the bucket truck with reference to the relevant paragraphs of this technical description. Moreover, the weight of the vehicle with all the equipment provided by this specification, as well as the weight distribution on the two axles should be provided.

Any technical deviations from the Technical Specifications of the Notice should be clearly indicated and adequately justified by the bidder.

These data shall be evaluated by the Technical Service according to the operational needs of the Service Units for which the requested vehicles are intended.

3. The actual permitted load of the bucket should be stated, along with the ultimate strength.

4. Detailed list of tools and components that shall accompany the bucket truck.

5. A list (with prices in the financial bid) for the special tools requires for repairing the vehicle and the superstructure. The cost of these tools shall not be taken into account in the financial evaluation of the bids.

6. The Supplier shall submit a time schedule of the training program, as well as a list with the training manuals.

7. The vehicle must have the following certificates which must accompany the machine under Directive 2006/42/EU/21-1209:

**Upon submission of the technical bid:**

A. An EC type-examination certificate by a certified organization. Refers to the type of the manufactured machine (annex 4 directive 2006/42/EU). The type examination should certify that the offered bucket truck complies with: a) EN 280 b) ANSI A92.2 category C or IEC 61057.

B. Submission of ISO 9001, 14001, 1801 of the manufacturer stating in the scope of application the special profession of construction, marketing and service of the supplier for marketing and service.

**Upon delivery of the vehicle:**

A Type AA lifting capacity certificate by a certified organization RENEWED EVERY TWO YEARS (GG 1186/2003)

B A manufacturer's CE declaration of conformity

8. Copy of the approval of the offered vehicle and the lifting platform (if it exists).

9. Maintenance and instructions for use book.

10. Flat Rate Manual for the vehicle and the lifting platform by the Manufacturer.

11. Service, Workshop & Repair Manual for the vehicle and the lifting platform by the Manufacturer.

12. Fully and detailed statement, approved by the Manufacturer of the vehicle and the lifting platform, with all the scheduled repairs up to 300,000 Km (description of works, spare parts etc.).

13. Spare-parts Catalogues by the Manufacturer of the vehicle and the lifting platform.

Note: The Supplier is obliged to deliver the items in paragraphs 7 - 13, at the latest during the inspection and receipt of the machine.

#### **14. FINANCIAL BID**

The financial bid shall be made based on the procedure stipulated in the notice and should include:

- The price of the offered bucket truck.
- The discount rate for spare parts and labour from the dealership or the authorized workshop. The cost of the spare parts and labour shall not be taken into account in the financial evaluation of the bids.



## ANNEX B

### (9.2. TECHNICAL PROPERTIES TABLE)

The following table is an essential component for the technical assessment and therefore it should definitely be completed by the bidder clearly and fully and attached to its Technical bid.

| S/N        | Required information  | Unit of Measurement        | Response        |
|------------|---|----------------------------|-----------------|
|            | <b>VEHICLE A</b>  |                            |                 |
| 1          | <u>Engine</u>   |                            |                 |
|            | diesel  |                            | YES NO          |
|            | water cooled  |                            | YES NO          |
|            | power according to directive 1999/99/EU                               | kW/rpm                     | .....           |
|            | torque " " "  | Nm/rpm                     | .....           |
|            | EURO VI anti-pollution technology                                     |                            | YES NO          |
|            |   |                            |                 |
| 2          | <u>Transmission system</u>  |                            |                 |
|            |   |                            |                 |
|            | synchronized fronts gears   | number                     | .....           |
|            | rear gears  | number                     | .....           |
|            | drive wheels (4X2)  |                            | YES NO          |
|            | radial tires  | type                       | .....           |
|            | Differential lock and operational indicator                           |                            | YES NO          |
|            | turned on, on the go  |                            | YES NO          |
|            | dry mechanical clutch   |                            | YES NO          |
|            | maximum speed   | km/h                       | .....           |
|            | power take-off (PTO) for moving the hydraulic-system pump of the boom |                            | YES NO          |
|            |   |                            |                 |
| 3          | <u>Braking system</u>   |                            |                 |
|            |   |                            |                 |
|            | braking system (e.g. with air, hydraulic etc.)                        |                            | .....           |
|            | parking brake (e.g. on 2,4 etc. wheels)                               |                            | .....           |
|            | service brake on all wheels, with support device                      |                            | YES NO          |
|            |   |                            |                 |
| <b>S/N</b> | <b>Required information</b>   | <b>Unit of Measurement</b> | <b>Response</b> |
|            | Anti-lock braking system (ABS with EBD).                              |                            | YES NO          |
|            | Lane Departure Warning System (LDWS)                                  |                            | YES NO          |
|            | safety brake in case of loss of air                                   |                            | YES NO          |
|            |   |                            |                 |
| 4          | <u>Steering system</u>  |                            |                 |
|            |   |                            |                 |
|            | steering wheels   | number                     | .....           |
|            | steering wheel with hydraulic   |                            | YES NO          |

|            |   |                            |                 |
|------------|---|----------------------------|-----------------|
|            | assistance                                    |                            |                 |
|            | adjustable in height and angle of inclination |                            | YES NO          |
|            | driver seat on the left                       |                            | YES NO          |
|            | towing hook on the front                      |                            | YES NO          |
|            | towing hook on the rear                       |                            | YES NO          |
|            | safety device                                 |                            | YES NO          |
|            | towing capacity (gross trailer weight)        | kg                         | .....           |
| 5          | <u>Electrical system</u>                      |                            |                 |
|            | Electrical system voltage (e.g. 24 V)         | V                          | .....           |
|            | Alternator (power)                            | W                          | .....           |
|            | Batteries (ampere hours)                      | Ah                         | .....           |
|            | <u>External lighting</u>                      |                            |                 |
|            | 2 headlights, front                           |                            | YES NO          |
|            | 2 passing beams, front                        |                            | YES NO          |
|            | 2 position lights, front                      |                            | YES NO          |
|            | 2 " " , rear                                  |                            | YES NO          |
|            | 2 brake lights, rear                          |                            | YES NO          |
|            | outline lights and reflectors                 |                            | YES NO          |
|            | 1 license plate light                         |                            | YES NO          |
|            | 2 pairs of direction and alarm lights         |                            | YES NO          |
|            | 1 rotating Led-technology emergency beacon    |                            | YES NO          |
|            | <u>Internal lighting</u>                      |                            |                 |
|            | 2 driving cab lights                          |                            | YES NO          |
|            | 1 portable lamp outlet                        |                            | YES NO          |
|            | indicator lights                              | number                     | .....           |
| 6          | <u>Control instruments for covered</u>        |                            |                 |
|            | Kilometers (Total/Partial)                    |                            | YES NO          |
| <b>S/N</b> | <b>Required information</b>                   | <b>Unit of Measurement</b> | <b>Response</b> |
|            | Speed (km/h)                                  |                            | YES NO          |
|            | Clock   |                            | YES NO          |
|            | Fuel-level indicator with a low-level light   |                            | YES NO          |
|            | Coolant thermometer                           |                            | YES NO          |
|            | For pressure in the brake reservoir           |                            | YES NO          |
|            | " in the hydraulic system                     |                            | YES NO          |
|            | Smart digital tachograph                      |                            | YES NO          |
|            | For grease oil                                |                            | YES NO          |
|            | Hours of operation                            |                            | YES NO          |
| 7          | <u>Audible devices</u>                        |                            |                 |

|            |  |                            |                 |
|------------|--|----------------------------|-----------------|
|            |  |                            |                 |
|            | 1 simple for the city  |                            | YES NO          |
|            | 1 siren  |                            | YES NO          |
|            | Backup buzzer  |                            | YES NO          |
|            |  |                            |                 |
| 8          | <u>Passenger compartment</u>                                     |                            |                 |
|            |  |                            |                 |
|            | Metal reinforced-structure compartment                           |                            | YES NO          |
|            | Driver and passenger seats                                       | number                     | .....           |
|            | Doors  | number                     | .....           |
|            | Security locks on the front doors                                |                            | YES NO          |
|            | Safety with a lever on the inside of all doors                   |                            | YES NO          |
|            | Ashtrays   | number                     | .....           |
|            | rotating sun visors  | number                     | .....           |
|            | driving mirror above the driver                                  | number                     | .....           |
|            | external driving mirrors on the left and right, electric, heated | number                     | .....           |
|            | side windows   | number                     | .....           |
|            | rear window  |                            | YES NO          |
|            | safety-glass in all the windows                                  |                            | YES NO          |
|            | Electrical opening of windows with lever 100% opening            |                            | YES NO          |
|            | air heating system (natural and artificial circulation)          |                            | YES NO          |
|            | Automatic seat belt for the driver                               |                            | YES NO          |
|            | Automatic seat belt for the passengers                           |                            | YES NO          |
|            | Insulating roof lining etc.                                      |                            | YES NO          |
|            | Wipers of at least two speeds and with an intermittent setting   |                            | YES NO          |
| <b>S/N</b> | <b>Required information</b>                                      | <b>Unit of Measurement</b> | <b>Response</b> |
|            | AirCondition   |                            | YES NO          |
|            | Radio-CD or USB  |                            | YES NO          |
|            |  |                            |                 |
| 9          | <u>Truck body</u>  |                            |                 |
|            |  |                            |                 |
|            | Reinforced-construction truck body                               |                            | YES NO          |
|            | Fitted on a steel, strong frame                                  |                            | YES NO          |
|            |  |                            |                 |
| S/N        | Required information   | Unit of Measurement        | Response        |
|            | Free surface for placing load                                    | m <sup>2</sup>             | .....           |
|            | Covered with a thick steel sheet                                 |                            | YES NO          |
|            | Floor distance from the ground without load                      | m                          | .....           |
|            | Steel cabinets:  |                            |                 |
|            | Built-in   |                            | YES NO          |
|            | Number of cabinets   | number                     | .....           |
|            | Number of compartments on each side                              | number                     | .....           |

|            |  |                            |                 |
|------------|--|----------------------------|-----------------|
|            | Cabinet depth  | m                          | .....           |
|            | Facade surface   | m <sup>2</sup>             | .....           |
|            | Along the length of the truck body                             |                            | YES NO          |
|            | With safety locks  |                            | YES NO          |
|            | Outward opening  |                            | YES NO          |
|            | External roof surface  | m <sup>2</sup>             | .....           |
|            | Rear door on the top shelf                                     |                            | YES NO          |
|            | Sides of free load-surface                                     |                            | YES NO          |
|            | Cabinet volume   | m <sup>3</sup>             | .....           |
|            | Cabinet drawings with dimensions                               |                            | YES NO          |
|            |  |                            |                 |
| 10         | <u>Dimensions and weights</u>                                  |                            |                 |
|            | Main vehicle dimensions:                                       |                            |                 |
|            | length   | m                          | .....           |
|            | width  | m                          | .....           |
|            | height   | m                          | .....           |
|            | Vehicle dimensions with the equipment:                         |                            |                 |
|            | length   | m                          | .....           |
|            | width  | m                          | .....           |
|            | height   | m                          | .....           |
|            | wheelbase  | mm                         | .....           |
|            | gross vehicle weight   | kg                         | .....           |
|            | frame tare weight  | kg                         | .....           |
|            | vehicle tare weight with its equipment                         | kg                         | .....           |
| <b>S/N</b> | <b>Required information</b>                                    | <b>Unit of Measurement</b> | <b>Response</b> |
|            | tare weight distribution on the axles                          | kg                         | .....           |
|            | on the front axle  | kg                         | .....           |
|            | on the rear axle   | kg                         | .....           |
|            | lifting work platform weight                                   | kg                         | .....           |
|            | payload in the truck body                                      | kg                         | .....           |
|            | maximum permitted load:  |                            |                 |
|            | on the front axle  | kg                         | .....           |
|            | on the rear axle   | kg                         | .....           |
|            | free height from the ground of the lowest point of the vehicle | mm                         | .....           |
|            | fuel tank capacity   | l                          | .....           |
|            | lift capacity with full load                                   | %                          | .....           |
|            |  |                            |                 |
|            | <b><u>B EQUIPMENT</u></b>                                      |                            |                 |
|            |  |                            |                 |
| 1          | Boom   |                            |                 |
|            |  |                            |                 |
|            | Articulating and telescopic                                    |                            | YES NO          |
|            | Articulating overcenter  |                            | YES NO          |
|            | insulating   |                            | YES NO          |
|            | According to EN 61057  |                            | YES NO          |
|            | According to ANSI A92.2(at least category C)                   |                            | YES NO          |
|            | Simultaneous performance of movement (rotation, lift-          |                            | YES NO          |

|            |  |                            |                 |
|------------|--|----------------------------|-----------------|
|            | descent, telescopic movement)  |                            |                 |
|            | Rotation   |                            |                 |
|            | Gearbox with wormgear rotation   |                            | YES NO          |
|            | Maximum bucket floor distance from the ground  | m                          | .....           |
|            | In a load radius (bucket)  | m                          | .....           |
|            | Maximum operating voltage according to Table 1 EN 61057 or ANSI A92-2                                | kV                         | .....           |
|            | Dielectric tests results attached: according to EN 61057   |                            | YES NO          |
|            | according to ANSI A92-2  |                            | YES NO          |
|            | Dielectric tests results according to EN 280 attached  |                            | YES NO          |
|            |  |                            |                 |
|            | Work buckets   |                            |                 |
|            | Number of work buckets:  |                            |                 |
|            | One bucket for 2 persons   |                            | YES NO          |
|            | Two buckets (one per person)   |                            | YES NO          |
| <b>S/N</b> | <b>Required information</b>  | <b>Unit of Measurement</b> | <b>Response</b> |
|            | Suspended on the end of the boom   |                            | YES NO          |
|            | Suspended on either side of the boom   |                            | YES NO          |
|            | At every position of the boom, the following should be achieved:                                     |                            |                 |
|            | leveling of the bucket floor   |                            | YES NO          |
|            | immobilization of bucket with latch  |                            | YES NO          |
|            | nominal load at any position of the boom:  |                            |                 |
|            | 2 person bucket  | kg                         | .....           |
|            | 1 person bucket  | kg                         | .....           |
|            | Ultimate bucket strength   | kg                         | .....           |
|            | Insulating liner   |                            | YES NO          |
|            | Insulating liner from PVC/polyethylene   |                            | .....           |
|            | Has seat belts and anchorage points thereof  |                            | YES NO          |
|            | Number of seat belts and anchorage points  | number                     | .....           |
|            | Has a canopy   |                            | YES NO          |
|            | Has water drainage system  |                            | YES NO          |
|            |  |                            |                 |
|            |  |                            |                 |
|            | The insulating liner is insured against lifting and falling when moving the bucket                   |                            | YES NO          |
|            | There is a step on the outside of the bucket   |                            | YES NO          |
|            | The embarkation on and disembarkation from the bucket should be done from a position at ground level |                            | YES NO          |

|            |  |                            |                 |    |
|------------|--|----------------------------|-----------------|----|
|            | Hydraulic quick-coupling at the work position for connecting tools (e.g. chainsaw, presse, etc.) |                            | YES             | NO |
|            | Bucket base surface  | m <sup>2</sup>             | .....           |    |
|            | height   | m                          | .....           |    |
|            | Vertical side dimensions   | mxm                        | .....           |    |
|            | Dielectric strength in accordance with EN 61057 or ANSI A92-2 :                                  |                            |                 |    |
|            | bucket   | kV                         | .....           |    |
|            | liner  | kV                         | .....           |    |
|            | According to EN 61057  |                            | YES             | NO |
|            | According to ANSI A92-2  |                            | YES             | NO |
|            |  |                            |                 |    |
| 3          | <u>High-pressure pumps for hydraulic boom-movement system</u>                                    |                            |                 |    |
| <b>S/N</b> | <b>Required information</b>  | <b>Unit of Measurement</b> | <b>Response</b> |    |
|            | there is one motor and one electric pump   |                            | YES             | NO |
|            | they operate electively in alternation   |                            | YES             | NO |
|            | motor pump: PTO transmission   |                            | YES             | NO |
|            | electric pump: electric motor transmission via the vehicle batteries                             |                            | YES             | NO |
|            | Maximum time of actual boom movement with full load via the vehicle batteries                    |                            | .....           |    |
|            | manually operated valve for boom descent, so that technicians can disembark safely               |                            | YES             | NO |
|            |  |                            |                 |    |
| 4          | <u>Boom operation and control instruments</u>  |                            |                 |    |
|            |  |                            |                 |    |
|            | switch   |                            | YES             | NO |
|            | fuses  |                            | YES             | NO |
|            | low-level battery indicator  |                            | YES             | NO |
|            | automatic electric engine switch   |                            | YES             | NO |
|            | ability to operate the boom from the bucket  |                            | .....           |    |
|            | latch mechanism between motor and electric boom movement   |                            | YES             | NO |
|            | other instruments  |                            | .....           |    |
|            |  |                            |                 |    |
|            |  |                            |                 |    |
| 5          | <u>Boom controllers</u>  |                            |                 |    |
|            |  |                            |                 |    |
|            | one at the base of the boom  |                            | YES             | NO |
|            | one at the bucket  |                            | YES             | NO |
|            | each ensures all the boom movements both through the   |                            | YES             | NO |

|            |  |                            |                 |
|------------|--|----------------------------|-----------------|
|            | motor pump and the electric pump   |                            |                 |
|            | operations from the bucket require the use of both hands by the operator   |                            | YES NO          |
|            |  |                            |                 |
| 6          | <u>Stabilizers</u>   |                            |                 |
|            |  |                            |                 |
|            | number on the front/rear   | number                     | ...../.....     |
|            | fully hydraulic  |                            | YES NO          |
| <b>S/N</b> | <b>Required information</b>  | <b>Unit of Measurement</b> | <b>Response</b> |
|            | distance of the stabilizer centers at full extension   | m                          | .....           |
|            | independent controller for each stabilizer   |                            | YES NO          |
|            | safety device for each pair of stabilizers that won't allow the vehicle to move if the stabilizers have not fully folded                   |                            | YES NO          |
|            | safety device for each pair of stabilizers that won't allow the operation of the boom if the stabilizers have not fully folded             |                            | YES NO          |
|            |  |                            |                 |
| 7          | <u>Mechanical endurance – Stability – Rollover safety</u>  |                            |                 |
|            |  |                            |                 |
|            | According to EN 280  |                            | YES NO          |
|            |  |                            |                 |
|            | Stability and operation, at an inclination of 0.5 ° beyond the permissible inclination to the horizontal, as indicated by the manufacturer | %                          | .....           |
|            | Maximum permissible vehicle inclination to the horizontal longitudinally   | %                          | .....           |
|            | maximum permissible vehicle inclination to the horizontal transversally  |                            | YES NO          |
|            | maximum permissible gradient for bucket truck operation  | °                          | .....           |
|            |  |                            |                 |
| 8          | <u>Safety devices</u>  |                            |                 |
|            |  |                            |                 |
|            | according to the instructions of Presidential Decree 57/2010. regarding the CE marking   |                            | YES NO          |
|            |  |                            |                 |
|            |  |                            |                 |
|            | according to EN 280  |                            | YES NO          |
|            | according to EN 61057  |                            | YES NO          |
|            | according to ANSI A92-2  |                            | YES NO          |

|            |  |                            |                 |    |
|------------|--|----------------------------|-----------------|----|
|            | according to decision 15085/593 ΦΕΚ 1186/803                                     |                            | YES             | NO |
|            | against the fall of the boom   |                            | YES             | NO |
| <b>S/N</b> | <b>Required information</b>  | <b>Unit of Measurement</b> | <b>Response</b> |    |
|            | loss of pressure in the hydraulic system   |                            | YES             | NO |
|            | movement suspension at the limit of each route                                   |                            | YES             | NO |
|            | possibility of boom descent in case of engine or pump fault                      |                            | YES             | NO |
|            |  |                            |                 |    |
|            |  |                            |                 |    |
|            | <b><u>C ACCESSORIES</u></b>  |                            |                 |    |
|            |  |                            |                 |    |
|            | two (2) safety seat belts  |                            | YES             | NO |
|            | spare-wheel, complete, affixed to the vehicle                                    |                            | YES             | NO |
|            | tools for changing the wheel   |                            | YES             | NO |
|            | tool set for vehicle maintenance   |                            | YES             | NO |
|            | tool set for superstructure (equipment) maintenance                              |                            | YES             | NO |
|            | triangle reflective warning sign   |                            | YES             | NO |
|            | portable car fire extinguisher 1.5 kg  |                            | YES             | NO |
|            | portable car pharmacy  |                            | YES             | NO |
|            | a detailed list of tools is attached   |                            | YES             | NO |
|            | the tools shall be delivered in a box  |                            | YES             | NO |
|            | lubrication apparatus (grease gun)   |                            | YES             | NO |
|            |  |                            |                 |    |
|            | the value of the above accessories shall be included in the price of the vehicle |                            | YES             | NO |
|            | stickers with the HEDNO logo in accordance with ANNEX C                          |                            | YES             | NO |
|            |  |                            |                 |    |
|            | <b><u>D COLOURING</u></b>  |                            |                 |    |
|            |  |                            |                 |    |
|            | all metal surfaces have been properly treated for oxidation protection           |                            | YES             | NO |
|            | blue-tinted external colouring RAL 5013  |                            | YES             | NO |
|            |  |                            |                 |    |
| <b>S/N</b> | <b>Required information</b>  | <b>Unit of Measurement</b> | <b>Response</b> |    |
|            | <b><u>E SPECIAL TOOLS</u></b>  |                            |                 |    |
|            |  |                            |                 |    |



|            |  |                            |                 |       |
|------------|--|----------------------------|-----------------|-------|
|            | a price list with all the special repair tools shall be submitted  |                            | YES             | NO    |
|            |  |                            |                 |       |
|            | <b><u>F GENERAL</u></b>  |                            |                 |       |
|            |  |                            |                 |       |
|            | The following are attached:  |                            |                 |       |
|            | user certificates  |                            | YES             | NO    |
|            | sales catalogues in combination however with user certificates   |                            | YES             | NO    |
|            | any other piece of evidence regarding sales and the satisfactory qualitative behaviour of the bucket trucks  |                            | YES             | NO    |
|            | number of the same bucket trucks that have been made available:  |                            |                 |       |
|            | vehicles   |                            | .....           | ..... |
|            | superstructures  |                            | .....           | ..... |
|            | formal copies of the certificates of the tests required according to EN 280 must be obligatorily attached  |                            | YES             | NO    |
|            | the bidder shall attach: Documents, catalogues, leaflets, pictures as well as detailed information regarding the construction, and capacities of the bucket truck and a general dimension drawing. |                            | YES             | NO    |
|            | study on vehicle load distribution with equipment  |                            | YES             | NO    |
|            | vehicle stability study with equipment   |                            | YES             | NO    |
|            | vehicle drawings with equipment  |                            | YES             | NO    |
|            | the bucket truck (vehicle and equipment) shall be new (constructed in the last six months and of the latest technology)  |                            | YES             | NO    |
|            | the vehicle shall comply with the Highway Code provisions and the regulations on the emission of gas and noise   |                            | YES             | NO    |
| <b>S/N</b> | <b>Required information</b>  | <b>Unit of Measurement</b> | <b>Response</b> |       |
|            | In the event of award, the Supplier shall submit the approval by the competent Ministry for the use of the bucket truck and its circulation on public roads  |                            | YES             | NO    |
|            |  |                            |                 |       |

|  |  |        |       |    |
|--|--|--------|-------|----|
|  | the vehicle and the equipment shall be delivered with their license plates registered to HEDNO at the expense of the supplier  |        | YES   | NO |
|  | The bucket truck shall be delivered commissioned to the Corporation's authorized representative by the manufacturer's representative   |        | YES   | NO |
|  | all the expenses for assembling and commissioning the bucket truck shall be borne by the Supplier  |        | YES   | NO |
|  | the frame shall be covered by a good operation guarantee with a declared duration of   | months | ..... |    |
|  | and rust protection for  | years  | ..... |    |
|  | the lifting boom shall be covered by a good operation guarantee with a declared duration of  | months | ..... |    |
|  | spare-parts availability   |        | YES   | NO |
|  | during the first three years within 5 working days from notification   |        | YES   | NO |
|  | during the next seven (7) years within 1 month from notification   |        | YES   | NO |
|  | reassignment of specialized personnel within 15 days from notification of fault that does not originate from personnel in Greece   |        | YES   | NO |
|  | in case of design deficiency the costs shall be borne by the supplier  |        | YES   | NO |
|  | The supplier has in Greece a repair workshop for the the offered type of vehicle & equipment   |        | YES   | NO |
|  | the supplier has in Greece a spare-parts warehouse   |        | YES   | NO |
|  | under the care of the Supplier's Representative, free inspections and maintenance of the bucket truck shall be performed after its delivery in the capital of the Prefecture where the vehicle is used | number | ..... |    |
|  | the guarantee covers faults (labour and spare-parts) except in case of improper handling   |        | YES   | NO |
|  | the supplier and its representative accept all the general terms of the specification  |        | YES   | NO |

|            |  |                            |                 |    |
|------------|--|----------------------------|-----------------|----|
|            | the repair workshops and spare-parts warehouses lists of the supplier in Greece are attached   |                            | YES             | NO |
|            | the solemn declarations of the authorized workshops regarding the acceptance of the repair-maintenance terms and guarantee duration are attached   |                            | YES             | NO |
|            | if the contract includes more than one vehicles, the supplier shall build a sample that shall be delivered to HEDNO for examination, comments and modifications by its competent services, before proceeding with the construction of the other vehicles of the Contract |                            | YES             | NO |
|            | The following are attached:  |                            | YES             | NO |
|            | User certifications  |                            | YES             | NO |
|            | Sales catalogues in combination however with user certificates   |                            | YES             | NO |
|            | Any other piece of evidence regarding sales and the satisfactory qualitative behaviour of the bucket trucks  |                            | YES             | NO |
|            | The operators and technical staff of HEDNO shall be trained by a technician of the supplier at its expense   |                            | YES             | NO |
| <b>S/N</b> | <b>Required information</b>  | <b>Unit of Measurement</b> | <b>Response</b> |    |
|            | <b><u>G MANUALS</u></b>  |                            |                 |    |
|            | Along with the vehicles, the following shall be submitted in printed and digital format:   |                            |                 |    |
|            | INSTRUCTIONS OF USE and MAINTENANCE MANUALS for the vehicle and the lifting platform in Greek: 8 items   |                            | YES             | NO |
|            | REPAIR MANUALS for the vehicle and the lifting platform: 2 sets in English   |                            | YES             | NO |
|            | SPARE-PARTS CATALOGUE for the vehicle and the lifting platform: 2 items CD-ROM or books in English   |                            | YES             | NO |
|            | FLAT RATE MANUALS for the vehicle and the lifting platform: 2 items  |                            | YES             | NO |