# *ANNEX II + III:* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract title: Supply of equipment for response to marine pollution incidents p 1 /18**

**Publication reference:** EuropeAid/140774/IH/SUP/ME

**Columns 1-2 should be completed by the contracting authority**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the contracting authority shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words ‘compliant’ or ‘yes’ are not sufficient)
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

| **1.**  **Item number** | **2.**  **Specifications required** | **3.**  **Specifications offered** | **4.**  **Notes, remarks,  ref to documentation** | **5.**  **Evaluation committee’s notes** |
| --- | --- | --- | --- | --- |
| **1** | **Inflatable Offshore Booms for oil spills**  **Quantity (1000 meters):**  Offshore booms are designed as a rapid response to assist in the containment and recovery of accidentally spill oil at open sea during offshore oil and gas exploration and production or spills from passenger’s vessels, cargo ships.   * Material: Neoprene vulcanised * Colour: Orange or black with reflective stripes * Overall inflated height: not less than 1015 mm * Freeboard: not less than 375 mm. * Draft: not less than 640 mm. * Ballast chain size: not less than 10 mm in skirt pocket * Section length: between 10 and 25 meters. * Empty boom weight, including ballast chain, kg/m: between 4.5 and 6 * Buoyancy to weight ratio: no less than 20:1 * Fabric braking strain (N/50 mm): not less than 3000. * Chain breaking strain (N): not less than 70 000 * Towing bridles: marine grade aluminum with polypropylene rope (4 pairs) * Tow speed: not less than 4 knots   **Training:**  Offer must include a four days training in Port of Bar for the operation and use of equipment and its technical characteristics. |  |  |  |
| **2** | **Hydraulic Storage Reels for Booms**  **Quantity (5)**   * Capacity storage of reels: from 180m to 250m * Hydraulic pressure: from 120 bar to 160 bar * Control valve on the reel * Reel frame and spool: steel or stainless steel painted in orange * Paint: marine grade paints for long term corrosion protection * Weight: 550 to 750 kg * Lifting: Four lifting points * Reel cover: PVC |  |  |  |
| **3** | **Sorbents**  **Quantity (2000 kg):**   * Rolls: 800 kg, Pads: 800 kg, Socks: 400 kg * Non-toxic * Made of Fibrillated Polypropylene fabric |  |  |  |
| **4** | **Oil Absorbent Booms**  **Quantity (2000 meters):**   * Boom diameter: not less than 20 cm * Boom length: not less than 3 m * Colour: white or other visible colour * Weight/pack: 10 to 20 kg |  |  |  |
| **5** | **Skimmer with Hoses**  **Quantity (2)**   * Disc skimmer * Recovery capacity rate: not less than 50 m3 per hour * Hydraulic pressure: not less than 130 bar * In built transfer lobe pump with nominal discharge pressure between 3 bar and 6 bar * Operating draft: between 35 cm and 50 cm * Maximum skimmer with hoses weight: 350 kg * Hoses kit with all quick release couplings   Minimum length per one skimmer: 15 m   * Single point lifting * Maximum wave height: 2 meters   **Training:**  Offer must include a four days training in Port of Bar for the operation and use of equipment and its technical characteristics. |  |  |  |
| **6** | **Portable Hydraulic Diesel Power Pack**  **Quantity (2)**  This equipment will be used as a power source for auxiliary hydraulically operated equipment such as skimmers, pumps, booms, reels, etc.   * Maximum Power: not less than 20 kW * Maximum working pressure: not less than 150 bar * Automatic shutdown * Included quick coupling connections * Aluminum fuel tank capacity: not less than 25 liter * Single point lifting ring, with forklift pockets * Maximum weight: 660 kg |  |  |  |
| **7** | **Portable Air Blower**  **Quantity (2)**   * Engine type: two stroke with gasoline fuel * Engine speed: from 6000 rpm to 7000 rpm * Air flow: between 800 m3/h and 1000 m3/h * Engine power: not less than 1.5 kW * ISO standard 3744 for noise level |  |  |  |
| **8** | **Floating towable storage tank**  **Quantity (2)**   * Aluminium or stainless tow bar * Material: Neporene vulcanised * Capacity in water: maximum 25m3 * Towing speed when empty: not less than 8 knots * Towing speed when filled: not less than 4 knots * Minimum two air cuffs along length of tank |  |  |  |
| **9** | **Hydraulic Diesel Power Pack**  **Quantity (1)**  This equipment will be used as a power source for auxiliary hydraulically operated equipment such as high capacity pumps, etc.   * Engine: 4-stroke, diesel, water-cooled * Maximum Power: not less than 50 kW * Maximum working pressure: not less than 160 bar * Automatic shutdown * Included quick coupling connections * Aluminium fuel tank capacity: not less than 100 litre * Four points lifting rings, with forklift pockets * Weight without fuel and oil: not less than 900 kg   **Training:**  Offer must include a four days training in Port of Bar for the operation and use of equipment and its technical characteristics. |  |  |  |
| **10** | **Portable Storage Tank for oil collection and transport**  **Quantity (2)**   * Capacity: not less than 4 m3 and not more than 6 m3 * Collapsible tank type. * Storage tank to supply with storage and transportation box * Material: Neoprene vulcanised |  |  |  |
| **11** | **Portable Container for response equipment**  **Quantity (5)**   * Capacity: not less than 1m3 * Made of Fibrillated Polypropylene Fabric * Non- Toxic |  |  |  |
| **12** | **Side Door Container for Response Equipment**  **Quantity (2)**   * Minimum 6 m container * Storage capacity: not less than 30 m3, in order to store 1 Reel, 1 Skimmer and 1 Power Pack * Colour: Orange * Double cargo doors in one end and in one side * Floor has to be corrosion resistant * Ventilations louvers * Standard: ISO Code 22G2 |  |  |  |
| **13** | **Self-contained breathing apparatus**  **Quantity (2)**   * Full face mask * Pressure regulator with gauge and whistle. * Pressure and flow regulator. * Max working pressure: not less than 200 bar * Type approved according to SOLAS Chapter II-2   **Training:**  Offer must include a four days training in Port of Bar for the operation and use of equipment and its technical characteristics. |  |  |  |
| **14** | **Personal protective clothing**  **Quantity (50 sets)**  **One set is composed of the following items:**  **Pair of Boots**   * Suitable to work with oil * Rubber made or other oil resistant material * Waterproof * Below knee-high * EU size 42 (10), 43 (10), 44 (10), 45 (10), 46 (10)   **Pack of Gloves (at least 20 pieces per pack)**   * Suitable to work with oil * Long cuffs * Gloves for outdoor activities, with thumb and index finger touch, with reinforcement in the palm of hand   **Pack of Protective suits (at least 20 per pack)**   * Disposable work suit type protective clothing * Oil resistant type protective clothing   **Safety Helmets**   * Material: Polyethylene * Resist penetration by objects. * Absorb the shock of a blow. * Water resistant and slow burning.   **Summer and Winter coverall suit and cap**   * Water resistant * Two pocket on the chest * Two front cargo pocket * Colour orange and grey * Label: "Uprava pomorske sigurnosti i upravljanja lukama", National emblem and Flag of Montenegro * EU size M (10), L (15), XL (15), XXL (10) |  |  |  |
| **15** | **Personal shoreline response equipment**  **Quantity (100 sets)**  **One set is composed of the following items:**  **Shovels**   * Long handles * Made of metal (steel) or aluminium * Blades made of tempered steel or aluminium * Square point type blade   **Buckets**   * With handles * Made of plastics   Capacity: between 10 lit and 15 lit  **Pack of Plastic Disposable Bags (50 bags per pack)**   * Heavy duty type * Capacity: between 25 kg and 50 kg |  |  |  |
| **16** | **Portable Fire-fighting Water Pump**  **Quantity (2)**   * Engine type: 4-stroke 3-cylinder in-line petrol engine with closed cooling circuit with water * Engine displacement: not less than 800 cm3 * Petrol tank capacity: not less than 15 lit * Engine power output: not less than 45 kW * Pump: direct driven 1-stage centrifugal pump made of corrosion resistant light alloy * Electric starter and alternator * Automatic Priming System * Free discharge: not less than 2100 l/min at 4 bars at suction height of 1.5 m * Must include: all couplings STORZ made of light alloy * Seawater resistant suction hose length: minimum 30 meters * Must include: mano-vacummeter, manometer and thermal overheat protection for centrifugal pump * Removable monitor to be equipped with all necessary parts and connections     **Training:**  Offer must include training for 5 skippers in area of Port of Bar. |  |  |  |
| **17** | **Multipurpose first response rigid-inflatable boat**  **Quantity (2)**  Shall be able to perform functions as first response for oil spills at sea and inland waterways, search and rescue at sea and inland waterways, “Port State” and “Flag State” inspections at sea and inland waterways   * Length overall: 9m – 12m * Beam: minimum 3m * Dry weight (empty): from 1500 kg to 1800 kg * Dry weight: from 1800 kg to 2800 kg   (with engines and full fuel tanks)   * Person capacity: minimum 10 * Engine power: minimum 2 x 225 HP * Hull material: Fiberglass * T-Top * Tube material: Neoprene- Hypalon * Tube colour: grey * Maximum speed: not less than 35 knots * Class B certificate * Compass and Steering console * Navigational console with Light * Electric Inflating Pump * Electric panel * Bilge pump capacity: between 115 and 140 l/per min. * Ladder * Fuel tank: minimum 350 lit * Fuel tank integrated within the hull structure * Fuel separator * Hydraulic steering * AIS B CLASS * Fixed radio station: VHF DSC * Horn, Speaker system and Blue rotation light * Labels: ‘’Port State Control’’, National emblem, Flag of Montenegro, registration number and EU Visibility labels * Trailer and Boat cover * SOLAS safety equipment (lifebuoy rings with 25m of rope, life jackets, firefighting extinguishers and distress hand flares)   The boat must not be a prototype. Two copies of full technical documentation are needed to be delivered in CD/DVD format.  **Training:**  Offer must include training for 4 skippers in area of Port of Bar. |  |  |  |
| **18** | **Personal equipment for boats and ski jets**  **Quantity (14 sets)**  **One set is composed of the following items:**  SAR helmet   * Open face helmet Standards PAS (028), EN 966, EN   (BS 6658), EN 1385, EN 12492 and EN 1077   * Open face helmet with long visor * Colour: Orange * Labels: ’’Search & Rescue’’   SAR wind offshore jacket   * Material: 3 - Layers Professional fabric * Waterproof and windproof * Heavy duty durable * Labels: ’’SEARCH & RESCUE’’ and ‘’UPSUL’’ * EU size M (3), L (4), XL (5), XXL (2)   SAR Life Vest (Buoyancy aid)   * Weight: between 1 and 1,5 kg * Colour: Red * Material: PU Coated Polyamide fabric * Breaking Strength: 450 kg single pull * Fastening, Interlocking Buckles, 2 or 3 bar * Whistle colour: orange, SOLAS approved   Pair of SAR Gloves   * Material: Neoprene * Thickness: 3 mm * Colour: Orange or Black * EU size M (3), L (5), XL (4), XXL (2) |  |  |  |
| **19** | **SAR wind and sea protection suit**  **Quantity (8 pcs)**   * Material: Gore-Tex * Waterproof down to10 m * Thermal protection * Possibility MTM (Made To Measure) * Integrated Neoprene Boots * Integrated gloves in sleeves * Allows ventilation * Diagonal or Vertical main zip * Cargo and Front pockets * Adjustable Neoprene neck seal * Waist adjustment for ergonomic fit * Thigh and Knife pockets |  |  |  |
| **20** | **First response multipurpose-towing ski jet**  **Quantity (3)**  Shall be able to perform functions as first response for oil spills at sea and inland waterways, search and rescue at sea and inland waterways, “port state” and “flag state” inspections at sea and inland waterways.   * Length overall: minimum 3.5 meters * Person capacity: minimum 2 persons * Beam: minimum 1.4 m * Dry weight: maximum 400 kg * Draft 0,3 m * Top speed min 35 knots * Engine minimum 75 kW * Fuel capacity minimum 60 lit. * Range minimum 90 NM * Hull colour: Red or Orange * Glass fibre Cartridge White Colour * Hull shall be easily replaceable * Hull material: Polyethylene (PE) hull, with ≥ 3 watertight bulkheads * Integrated aft deck with workplace of minimum 1.5 m2 * It has to be possible to access the waterjet from the top of the aft deck * Crew Stainless Safety Handles set * Auxiliary Electrical System (AES) Control Box: * Flashing Blue Light (2 pcs) * Navigational Light: Red (1 pcs), Green (1 pcs), White (1 pcs) * Front-mounted search light on rack (2 pcs) * External 12 V Connection * Quick Load System including Explorer Waterproof case, for installation on the work space * Trailer and ventilated cover * Labels and markings of : "Uprava pomorske sigurnosti i upravljanja lukama", National emblem, Flag of Montenegro, registration number, special assistance number for sea 129, and EU Visibility labels   The ski jet must not be a prototype. Two copies of full technical documentation are needed to be delivered in CD/DVD format.  **Training:** Offer must include training for six skippers in area od Port of Bar. |  |  |  |
| **21** | **Portable handheld VHF radio**  **Quantity (6)**   * Frequency range 156.025 – 157.425 MHz * Output Power: not less than 6W * Battery (Li-ion) life: not less than 2000 mAh * Operating temperature range -10C to +50C * Waterproof Rating: IPX7 or IPX8 |  |  |  |
| **22** | **Double cab – pick up and transport commercial vehicle**  **Quantity (2)**  The vehicle is intended to be used on all types of roads for transport of specialized equipment, including towing of boat and ski jet vessels for interventions in cases of marine pollution incidents, search and rescue operations, including access to areas affected by floods or other natural disaster, in the areas along the sea side and Lake of Skadar.  **General requirements:**   * Statement that the vehicle is offered from authorized seller with an authorized service for the vehicle on the territory of Montenegro * Marks and labels clearly indicating owner (Uprava pomorske sigurnosti i upravljanja lukama) and purpose of vehicle, special assistance number for sea 129, EU Visibility labels; * Led rotation flashing orange light, * Additional LED roof lights * Vehicle commercial warranty: min 5 years   **Constructional characteristics of the vehicle**  Engine:   * Type of fuel: Diesel * Emission standard: Euro 6 * Engine volume (cm3): min 2100, max 2500 * Engine power (kW): max 130 * Average fuel consumption maximum 9 lit/100 km   Transmission:   * Type of transmission: Manual or Automatic * 4WD (Four-Wheel Drive)   Vehicle dimension:   * Length (mm): min 5000, max 5500 * Exterior width (exterior mirrors folded): max 2100 mm * Wheelbase: minimum 2700 mm * Pick-up Box Dimensions:   Length at floor: min 1500, max 1620 mm  Width: up to 1600 mm   * Clearance: min 220 mm * Approach angle: min 28° * Wheels: min 17", Alloy * Number of seats: minimum 4 * Number of doors: minimum 4   Colour:   * White with reflective self-adhesive labels   Safety system:   * ABS (Anti-lock Braking System) * Brake assistance * Vehicle Stability Control * Hill-start Assist Control * Downhill Assist Control * Rear differential lock * Rear-view camera   Vehicle capacities:   * Payload: min 1000 kg * Towing capacity: Min 2500 kg * Fuel tank capacity: min 70 lit   Other equipment:   * Towing hook, ready for the electrical connection to the trailer * Hard Top * Tailgate with manual or automatic locking * Manual or automatic air conditioning * Standard Airbags Packet * Tools and accessories for tyres replacement |  |  |  |