Interreg Co-funded by the European Union

NEXT Romania – Republic of Moldova

Technical specifications

"Truck with container for accessories, manipulator and high-capacity towable motor pump (1100 m³/h)."

1. PRODUCT PURPOSE:

The module is intended for interventions carried out by the General Inspectorate for Emergency Situations (GIES). It is designed for crisis missions, including the transport and operation of containers with special equipment in urban, rural and difficult-to-access environments. The module must be robust, capable of immediate mobilization and operate reliably in dynamic conditions, on difficult terrain. The entire system, including equipment and accessories, must comply with the provisions of the annexes.

2. GENERAL ORGANIZATION AND COMPONENTS

The truck with hydraulic loading/unloading system with hook and manipulator consists of the following components:

2.1. Chassis;
2.2. Hydraulic loading/unloading system with hook and manipulator;
2.3. Metal transport container;
2.4. Additional equipment;
2.5. Large capacity towable pump (minimum 1100 m3/h).

3. TECHNICAL SPECIFICATIONS - TRUCK:

3.1.1. Vehicle category: N3GS, in accordance with the regulations on the registration of vehicles and trailers;

3.1.2. New and unused vehicle chassis must be manufactured in 2025 or later;

3.1.3. The chassis manufacturer must have an official national representative in the Republic of Moldova, capable of ensuring maintenance and warranty for both the vehicle offered and the entire assembly (chassis + superstructure). The warranty period is at least 3 years, and the post-warranty period is at least 7 years;

3.1.4. Overall dimensions (L x W x H) of the vehicle:

- Maximum length: 12,000 mm;
- Maximum width: 2,550 mm;
- Maximum height (measured from ground level): maximum 3,800 mm, when loading a metal container manufactured according to DIN 30722 standards (which define the hook height and the distances to the anchoring elements on the transport platform subframe), with internal dimensions between 4,250 and 7,000 mm;

3.1.5. Loading capacity of the vehicle, equipped with the hydraulic loading/unloading system with hook: minimum 15,000 kg;

3.1.6. Rated motor power: minimum 350 HP (generated exclusively by the internal combustion engine);

3.1.7. Estimated engine life cycle: minimum 1,000,000 km;

3.1.8. Maximum speed: minimum 100 km/h;

3.1.9. Maximum gradient: minimum 30%;

When fully equipped, with all supplies and crew on board (fully operational), the vehicle must maintain its stability to safely travel on terrain with slopes of at least 25 degrees.

The angles of attack, departure angles and ground clearance of the fully operational vehicle must allow movement on unpaved roads and rough terrain:

3.1.9.1. Ground clearance: minimum 300 mm;

3.1.9.2. Angle of approach: minimum 25 °;

3.1.9.3. Departure angle: minimum 25 °.

3.1.9.4. The vehicle, equipped with a hydraulic hook loading/unloading system, has an adjustable rear underrun protection device (RUPD);

3.1.9.5. The special vehicle will be delivered and will operate without a tachograph.

3.2. Chassis

3.2.1. **Engine and auxiliary systems**:

3.2.1.1. Emission standard: according to EU regulations in force on the date of delivery;

3.2.1.2. Fuel type: diesel;

3.2.1.3. Fuel tank with a minimum capacity of 300 liters, AdBlue tank with a minimum capacity of 25 liters, positioned so as not to affect the ability to travel on rough terrain and protected laterally and below by a metal shield, against damage when traveling on paved or unpaved roads;

3.2.1.4. Electric engine preheating system for use during periods of standstill, powered by an external source;

3.2.1.5. Oil sump designed for slopes exceeding 30^0, protected at the bottom by a metal shield, against damage when driving on paved or unpaved roads;

3.2.1.6. Towbars for the maximum load of the fire truck, located at the front and rear of the chassis;

3.2.1.7. Equipped with a traction control system (ASR or equivalent).

3.2.2. **Transmission:**

3.2.2.1. **6x6 transmission** with differential lock for front, rear and interaxle axle;

3.2.2.2. Automatic or automated manual transmission, dedicated to vehicles, with sufficient gear ratios to ensure movement in all driving conditions;

3.2.2.3. Front axle suspension with stabilizer bar or pneumatic system, designed to operate both on paved roads and on unpaved or rough terrain;

3.2.2.4. Rear axle suspension with stabilizer bar or pneumatic system, designed to operate both on paved roads and on unpaved or rough terrain.

3.2.3. **Wheel and tire system:**

3.2.3.1. Tires must be manufactured at least in the year of purchase;

3.2.3.2. Mud and snow (M+S) tires mounted on steel rims (including spare tire). Tires must have a tread suitable for both paved and unpaved roads;

3.2.3.3. The rear axle may have dual wheels;

3.2.3.4. Spare wheel of the same type and size as those fitted to the vehicle. The vehicle must be equipped with a mechanism for lowering and raising the spare wheel from the mounting position without affecting the ground clearance, regardless of its location on the vehicle.

3.2.4. **Steering system**: Power steering.

3.2.5. **Braking system**, at least the following requirements:

3.2.5.1. Electrically assisted;

3.2.5.2. Anti-lock braking system (ABS or equivalent);

3.2.5.3. Throttle slip regulation (ASR or equivalent);

3.2.6. Electronic stability program (ESP or equivalent);

3.2.7. Auxiliary braking system (retarder or equivalent);

3.2.8. Hill start assist system;

3.2.9. Hill descent control system;

3.2.9.1. Coupling for the trailer's pneumatic braking system;

3.2.9.2. The vehicle must not be equipped with a speed limiter;

3.2.9.3. The braking system must have an external connection, electrical or pneumatic, which allows a minimum pressure to be permanently maintained in the system when stationary.

3.2.9.4. **Electrical system:**

3.2.9.5. Equipped with sockets for connecting to external devices;

3.2.9.6. System voltage: 24 V;

3.2.9.7. Two maintenance-free batteries;

3.2.9.8. Main switch for disconnecting all vehicle consumers;

3.2.9.9. All electrical system cables must be hidden and protected from impact during movement and must be halogen-free;

3.2.9.10. The vehicle must be equipped with an external connector to allow stationary charging (when parked) of batteries and other equipment that requires charging. The battery charging system must include an electronic charger with automatic adapter for long-term maintenance and storage;

3.2.9.11. The external 230 V AC connector must be a male connector, mounted on the driver's side of the vehicle. Two female connectors must also be provided, each with an attached cable of at least 10 meters;

3.2.9.12. The 230 V AC circuit must be equipped with earthing, ensuring a leakage current of maximum 30 mA, or protected by an isolating transformer. If the protection is earthing only, a warning label near the socket must have the following message: „ATENȚIE! A SE CONECTA DOAR LA O PRIZĂ AUTORIZATĂ”.

3.2.9.13. Starting the engine will not be possible while connected to an external 230 V AC power source, unless the outlet has an automatic disconnect that deactivates when the engine is started.

3.2.10. **Lighting system**:

3.2.10.1. Signal lights (mounted on the chassis) with front and rear fog lights;

3.2.10.2. All vehicle headlights and lamps must be LED only, protected by a stainless steel protective grille to prevent accidental damage.

3.2.11. **Cabin**:

3.2.11.1. The steering wheel will be on the left side. The cabin will be a single-piece, metal type, closed, advanced, with suspension and anti-corrosion protection;

3.2.11.2. The cab must be manufactured and tested in accordance with the ECE R29-3 standard;

3.2.11.3. Manual folding of the cab must be possible using a hydraulic system;

3.2.11.4. Equipped with 2 doors and 1+2 seats, and all seats must be equipped with seat belts in accordance with legal requirements;

3.2.11.5. The driver's seat must have air suspension and be adjustable in at least two directions;

3.2.11.6. Sunshades mounted on the inside and outside of the windshield;

3.2.11.7. Heated rear-view mirrors with electric or manual adjustment;

3.2.11.8. Front and right exterior mirrors for blind spots, with electric or manual adjustment;

3.2.11.9. All side windows are electrically or manually operated;

3.2.11.10. The cabin must be equipped with an air conditioning system (with automatic heating and air conditioning)

3.2.11.11. The cab must be equipped with an additional autonomous cabin heating system, which uses diesel directly from the vehicle tank. This function must be able to be used both during travel to and from intervention missions and when stationary at the intervention site;

3.2.11.12. The color of the **cab** will be red, shade RAL 3000. Car wrap (stickers or foil) is not allowed;

3.2.11.13. AM/FM vehicle radio with multifunction display and USB connections, integrated into the vehicle dashboard, with a minimum of four speakers;

3.2.11.14. Satellite navigation system based on GPS or Galileo with Android Auto/Apple CarPlay, with updated maps of the Republic of Moldova and Europe. With the possibility of updating maps by the vehicle owner;

3.2.11.15. An HD rear view camera (1920x1080) that activates automatically when reversing, with integrated rear parking sensors;

3.2.11.16. A traffic recording device that records on an SD or microSD card (the card will be delivered with the vehicle, compatible with the recording device, with a minimum capacity of 128 GB, at least Class 10+ with a minimum transfer rate of 10 MB/s), with a minimum video recording resolution of 1920 x 1080@30 fps Full HD. It will allow video recording (including vehicle speed data and GPS position), so that the route and the road traveled can be monitored (regardless of whether the acoustic and light signals are active). During periods of standstill with the engine off, the recording function will be automatically deactivated, and it will be automatically activated when the engine is started. The necessary accessories for downloading the data will also be provided. Depending on the technical solution adopted for the camera device (integrated or not in the interior elements of the cabin), a mounting system will be provided to allow its use.

3.2.12. **Additional equipment:**

- Acoustic and optical warning system:
- A light bar, with a minimum length of 1200 mm and no wider than the cab, mounted on the roof at the upper front of the cab, with blue LED strobe modules, protected by a stainless steel grille for impact resistance, with the following specifications:
- Four blue side modules and two white modules, positioned symmetrically on either side of the central acoustic module.
- Each optical module must contain a minimum of 24 LEDs, with a minimum power of 50 lumens per LED and a flash frequency of at least 50 flashes per minute;
- The length of each optical module must be at least one third of the total length of the light bar (with the maximum dimensions allowed after mounting the diffuser);
- Polycarbonate lenses and caps for maximum visual effect and anti-fog;
- Corrosion and water resistant protected bar;
- The acoustic module must include one or more speakers;
- Acoustic signal generator with at least three tone options;
- Maximum power of at least 150W;
- External audio input with switchable function for transmitting voice messages via microphone;
- Optical signaling system of LED "flash" type with eight blue lamps, each with at least 8 LEDs, protected by a stainless steel grid, located as follows:
- 2 lamps in the front of the cabin, at the radiator level;
- 2 lamps at the upper rear of the vehicle, integrated into the superstructure;
- 2 lamps on each upper side, integrated into the superstructure.
- A sequence of blue "flashing" LED lamps/modules with a flashing frequency of at least 50 flashes per minute, integrated into the sides of the container (covering at least 50% of the container length symmetrically), emitting at least 50 lumens per LED and at least 8 LEDs/module;
- Control box for the acoustic-optical warning system, mounted on the dashboard.
- An audible warning device that produces a sound activated by the reverse gear for the vehicle to move backwards.

3.3. **Hydraulic loading/unloading system with hook and manipulator.**

3.3.1. The hydraulic hook loading/unloading system is mounted on the vehicle chassis;

3.3.2. The hydraulic hook loading/unloading system will be manufactured in accordance with the DIN 30722 standard (which defines the hook height and the distances from the subframe anchoring elements on the transport platform);

3.3.3. It will allow the loading/unloading of containers manufactured according to the DIN 30722 standard, with the following dimensions:

- Maximum internal length L max = 7,000 mm;
- Bed height varying between 500 – 800 mm;
- Maximum external width it_{MAX} = 2,550 mm.

3.3.4. The system must have the capacity to handle the metal bed with a total weight of: at least 16,000 kg (the container's own weight plus its load);

3.3.5. It must allow for the secure attachment **of the metal platform/container** manufactured in accordance with DIN 30722 standard during transport, even on unpaved roads;

3.3.6. The hydraulic hook loading/unloading system must be controlled from the vehicle's driver's seat.

3.3.7. **The manipulator is mounted on the chassis;**

3.3.8. Minimum telescopic arm length: 10 m;

3.3.9. The manipulator must be able to lift at least 4,450 kg at a distance of 2.5 m and at least 1,300kg at a distance of 10 m;

3.3.10. The manipulator must have a minimum lifting capacity of 128 kNm;

3.3.11. Base: cast and stress relieved to eliminate potential stress concentrators in welded construction;

3.3.12. The rotation system lubrication will be carried out in a tank of gear oil, completely separate from the hydraulic system;

3.3.13. The manipulator must be able to rotate at a minimum angle of 415°;

3.3.14. The manipulator must be able to rotate without moving the container at 360 °;

3.3.15. The column must include an internal channel for guiding the hydraulic hoses, ensuring their protection;

3.3.16. The arms will consist of two hydraulically articulated segments, one of which is telescopic with a minimum of three hydraulic sections;

3.3.17. Minimum operating radius of 10 meters, using a specially designed arm for medium distances;

3.3.18. Additional skids on the left and right sides of the arm to ensure high accuracy;

3.3.19. Additional articulation between the column and the main boom of the crane, as well as between the main boom and the telescopic boom, ensuring constant torque and speed in any working position of the crane;

3.3.20. Stabilizing beam with hydraulic extension on both sides for optimal opening;

3.3.21. Hydraulic telescopic system for ground adjustment;

3.3.22. Ball joint legs for optimal adaptability and stability in various terrain conditions;

3.3.23. The manipulator must be equipped with a main distributor capable of performing 2-3 simultaneous movements;

3.3.24. The manipulator will be operated manually from the base, only in case of emergency;

3.3.25. The manipulator will be equipped with a remote control system, allowing efficient and safe operation from a considerable distance;

3.3.26. Safety features: the electronic system must include an overload detection function, with the ability to block controls that could increase the operating torque beyond specified limits, thus ensuring the protection of both the manipulator and the operator;

3.3.27. The manipulator must be equipped with a mushroom-type emergency stop button, located in an accessible and visible place, for immediate stopping of operations in critical situations;

3.3.28. The crane rotation system will be equipped with safety valves to ensure protection during rotation operations;

3.3.29. The main boom cylinder and secondary cylinders (double-acting) will be

equipped with safety valves to protect against overloads and unforeseen situations;

3.3.30. Telescopic cylinders must be equipped with safety valves to ensure safe and efficient extension and retraction operations;

3.3.31. The manipulator will be equipped with safety valves in the hydraulic caliper system to prevent overloads and ensure safe and efficient operation of the equipment under various conditions;

3.3.32. Electronic systems: a visual and acoustic warning system for the operator will be installed, with warning lights mounted on the outriggers/stabilizers, to ensure the safe and efficient operation of the manipulator;

3.3.33. Electronic systems: a capacity limitation system will be implemented, with continuous adjustment depending on the extension and position of the stirrups. The system will ensure the maximum possible load lift in stable conditions for any position of the stirrup legs;

3.3.34. Electronic systems: a collision prevention system will be installed to avoid bridges or overpasses during transport, ensuring the safety of the manipulator and preventing material damage;

3.3.35. Electronic systems: a warning system will be implemented to signal if the outrigger/stabilizer system is not properly secured, preventing potential accidents or damage;

3.3.36. An integrated electronic system for maintenance alerts, diagnostics and error code generation will be installed, ensuring optimal functionality and reliability of the manipulator;

3.3.37. An automatic system will be implemented to divert hydraulic oil directly to the tank if the lever is not operated for 3 seconds, ensuring the safety and protection of the equipment;

3.3.38. An automatic system will be implemented to turn off the crane's electronic system if the lever is not operated for 30 minutes, ensuring energy savings and operational safety;

3.3.39. The manipulator will be equipped with an LED spotlight mounted on the telescopic arm, which provides additional lighting for operation in low light or dark conditions, ensuring safety and efficiency during nighttime activities;

3.3.40. Hydraulic system: The manipulator will be equipped with a factory-installed high-pressure hydraulic pump, together with a fully equipped hydraulic oil tank with return filter and wear indicator.

3.4.**Flat rack container**

The container will be equipped with a support and loading/unloading system, manufactured according to the DIN 30722 standard (which defines the hook height and the distances from the subframe anchoring elements on the transport platform).

The platform has the following characteristics (Annex no. 2):

3.4.1. Inner length: maximum 7,000 mm;

3.4.2. External width: maximum 2,550 mm;

3.4.3. Maximum height (with supports and tarpaulin installed): maximum 2,400 mm;

3.4.4. Equipped with locking and securing systems while the vehicle is moving;

3.4.5. Metal flooring with anti-slip strips, impact-resistant, equipped with slots or anchoring systems;

3.4.6. The opening system of the equipment compartments will be provided with side rollers (left and right), and the rear compartment will be equipped with a rigid door, with a vertical opening upwards.

3.5. The communications equipment will include:

a) A fuse panel for all equipment, including warning devices;

b) 12V DC bipolar sockets for communications equipment, including electrical conductors, capable of carrying a current of 20 A and supplied with paired connectors;

c) Bipolar sockets must be installed in accessible and properly insulated places;

d) An antenna installed on the cabin with the antenna cable placed inside, with a TNC connector.

3.6. The vehicle will be marked on the sides and front with the inscriptions "DRCS nr.2", as well as with the logos of the "General Inspectorate for Emergency Situations". In addition, the vehicle will be marked on the sides with the logo "112".

3.7. The color of the superstructure will be red, shade RAL 3000. Car wrap (stickers or foil) is not allowed. The vehicle will be equipped with reflective plates and strips.

3.8. The inscriptions and markings will meet the requirements set out in Government Decision No. 500/2018. The exact text of the inscriptions (name and identification number of the firefighters, type of special vehicle, etc.) will be provided by the beneficiary (GIES) before signing the contract.

3.9. The vehicle must be equipped with small lamps with flexible rubber arms, mounted behind the chassis.

3.10.The vehicle, including all its components and equipment, must be new, unused, and not refurbished.

3.11.List of standards relevant to the vehicle, configuration and equipment requested:

3.11.1. EN 30722-1 - Mobile bodywork - Flat type - Dimensions and general requirements for the hook arm system

3.11.2. EN 1846-1:2020 – Firefighting and rescue vehicles – Part 1: Nomenclature and designation

3.11.3. EN 1846-2:2020 – Firefighting and rescue vehicles – Part 2: Common requirements – Safety and performance

3.11.4. EN 1846-3:2020 – Firefighting and rescue vehicles – Part 3: Permanently installed equipment – Safety and performance

3.11.5. EN 12769:2000 Firefighting and rescue vehicles Resistance to fire

3.11.6. EN 14600:2005 – Firefighting and rescue vehicles and equipment – Components for electrical and electronic installations

3.11.7. UNECE Regulation No. 29 — Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants of the cab of a commercial vehicle

3.11.8. EEC Regulation No. 65 – Uniform provisions concerning the approval of special warning lamps for motor vehicles

3.11.9. EN 60309 – Plugs, socket-outlets and couplers for industrial use (used in emergency vehicles for electrical connections)

3.12. Annexes no. 1 – 5 are an integral part of this Technical Specification. For all specifications and products listed in the annexes, certificates of conformity issued by the

competent authorities, as well as self-declarations of conformity and/or test reports, shall be submitted as part of the submitted offer, as appropriate.

3.13. List of manuals, diagrams (electrical, pneumatic, hydraulic), list of technical inspections (maintenance), list of spare parts (part number).

3.14. The Bidder shall provide the necessary training to the beneficiary personnel for the operation and maintenance of the vehicle and all components. The training plan shall be part of the bid. The Bidder shall also provide at least 2 monitoring visits to the production process. The Bidder shall also designate the training materials (in printed and electronic format (PDF or PPT format)) during the training sessions.

3. RECEPTION

The delivery of the vehicle shall be carried out by 30.03.2027 at the premises of the Regional Search and Rescue Directorate No. 2 of the General Inspectorate for Emergency Situations, located at 1 Moscovei Street, Bălți municipality.

After the delivery of the vehicle and the related equipment, they shall be tested. The testing period shall last 7 days. Upon completion of the testing period, an Acceptance Form shall be signed, in accordance with the legislation of the Republic of Moldova in force.

Upon issuance of the Acceptance Form, the warranty period shall commence, during which any defects shall be reported, and the defective equipment (parts/equipment) shall be replaced without the application of any fees.

ELABORATE:

Deputy Head of the Regional Search and Rescue Directorate No. 2 of the GIES
major of internal service **Constantin TARÎȚE**

Digitally signed by Tarîţe Constantin
Date: 2026.04.07 09:35:59 EEST
Reason: MoldSign Signature
Location: Moldova
MOLDOVA EUROPEANĂ

Acting Head of the Scubadiving Service
of the Regional Search and Rescue Directorate No. 2 of the GIES
captain of internal service **Veaceslav TOCAREV**

Digitally signed by Tocarev Veaceslav
Date: 2026.04.07 09:10:22 EEST
Reason: MoldSign Signature
Location: Moldova
MOLDOVA EUROPEANĂ

Head of logistics service
of the Regional Search and Rescue Directorate No. 2 of the GIES
captain of internal service **Radu ANTOCI**

Digitally signed by Antoci Radu
Date: 2026.04.07 09:09:14 EEST
Reason: MoldSign Signature
Location: Moldova
MOLDOVA EUROPEANĂ

COORDINATED:

Head of the Property Management and
Infrastructure Development Section of the GIES
colonel of internal service **Corneliu EȘANU**

Digitally signed by Eşanu Corneliu
Date: 2026.04.07 09:42:21 EEST
Reason: MoldSign Signature
Location: Moldova
MOLDOVA EUROPEANĂ

Annex No. 1
according to technical specifications

LIST
specific materials on the chassislorry

No.	Product name	MU	Amount
1.	Vehicle first aid kit	unit	1
2.	Chassis specific tool kit and accessories	unit	1
3.	Hydraulic jack that allows replacing a wheel on a fully loaded vehicle	unit	1
4.	Reflective triangles	unit	2
5.	Jack support plate	unit	1
6.	Spare wheel (rim + tire) mounted on chassis or vehicle	unit	1
7.	P6 type fire extinguisher mounted in the cabin	unit	1
8.	Wheel fixing track	unit	2
9.	Tire inflation hose with pressure gauge, which can be connected to a vehicle-mounted air outlet, long enough to reach any wheel	unit	1
10.	Snow chains for all drive wheels of the vehicle	Set	2
11.	Reflective vests	unit	3

Annex No. 2
according to technical specifications

TECHNICAL SPECIFICATIONS
„ HOSES CONTAINER AND EQUIPMENT"

1. DESTINATION

1.1. The container provides the materials and equipment necessary for the operationalization and optimal execution of specific missions during long-term interventions carried out at national or international level.

1.2. The container and its contents will be subject to a verification program developed by the specialists of the General Inspectorate for Emergency Situations together with those of the supplier before initial delivery. The purpose of this process is to determine whether they meet the technical and tactical performance requirements set out in the current technical specifications.

2. GENERAL ORGANIZATION AND COMPONENTS

2.1. The container will be manufactured according to the DIN 30722 standard (which defines the hook height and the distances to the subframe anchoring elements on the transport platform) to allow land transport with specific vehicles equipped with a Hydraulic hook-lift loading/unloading system, in accordance with the DIN 30722 standard.

2.2. Equipment and accessories installed and/or supplied with the vehicle.

3. CONTAINER TECHNICAL SPECIFICATIONS

3.1. The transportable container will be built in accordance with DIN 30722, which defines the hook height and the distances to the anchoring elements of the subframe on the transport platform. It will be loaded on vehicles equipped with a hook system that allows its loading/unloading and will meet the following dimensional specifications:

3.1.1. Inner length L. = 7000 mm;

3.1.2. Maximum external width l = 2550 mm (preferably 2500 mm);

3.1.3. External height h = 2400 mm;

3.2. The total mass of the container assembly (including the lifting/loading hook assembly) loaded with all materials/equipment listed in the product inventory must not exceed 15,000 kg;

3.3. The material transport compartment: must allow the storage and transport of at least 1000 meters of hose, with a diameter of up to 300 mm, with couplings, and allow the deployment of hose pipes and must be organized with spaces designed for the following categories of technical equipment:

3.3.1. Telescopic lighting mast, according to annex no. 3;

3.3.2. Hose and accessory compartment, according to Annex No. 4;

3.4. The container will be equipped with an autonomous electrical system, powered by one or two batteries, with the option of recharging from an external power source (external 220 V generator). The lighting system will include:

3.5. LED interior lighting, ensuring adequate illumination for identifying all

equipment inside.

3.6. External lighting required for unloading materials, with LEDs that will illuminate the area around the container within a radius of 5 meters. This system will be designed to fit within the overall dimensions of the container.

3.7. External marking lighting with orange LED lamps positioned in the upper corners of the container, visible from the side and rear. Additional orange LED lamps of the same type are installed on the lower side, vertically aligned with the upper lamps.

3.8. The hose compartment container must be equipped with at least the following:

3.8.1. A rear door equipped with ladder access.

3.8.2. Floor clad with seawater-resistant anodized checkered tiles and stainless steel walls.

3.8.3. Fully enclosed, foldable aluminum top covers that also function as safety railings.

3.8.4. Equipment and tool cabinets, equipped with access panels and roller doors with locks.

3.8.5. Hose compartments equipped with fastening belts to prevent hoses from moving during container handling.

4. PAINTING AND LABELING

4.1. The container color will be red (RAL 3000). Car wrap (stickers or foil) is not permitted. Aluminum surfaces will not be painted.

4.2. The specific markings will include the text "SALVATORI ȘI POMPIERI", the single emergency call number "112", the logos of the General Inspectorate for Emergency Situations and the name of the container type "LARGE CAPACITY PUMPING CONTAINER". The inscriptions and markings will meet the requirements set out in Government Decision no. 500/2018. The exact text of the inscriptions (name and identification number of the firefighters, type of special vehicle, etc.) will be provided by the beneficiary (GIES) before signing the contract.

5. LIST OF RELEVANT STANDARDS

5.1. EN 12079 – Offshore containers

5.2. EN 12075 – Rescue systems for confined spaces

5.3. EN 14953 – Mobile emergency containers

5.4. EN 14502 – Lifting equipment for rescue operations

5.5. EN 12100 – Safety of machinery

5.6. EN 45545 – Fire safety in transport containers

5.7. EN 1991 – Structural design codes for containers

5.8. EN 60309 - Plugs, socket-outlets and couplers for industrial use (used in emergency vehicles for electrical connections)

5.9. CE 60364 - Low voltage electrical installations

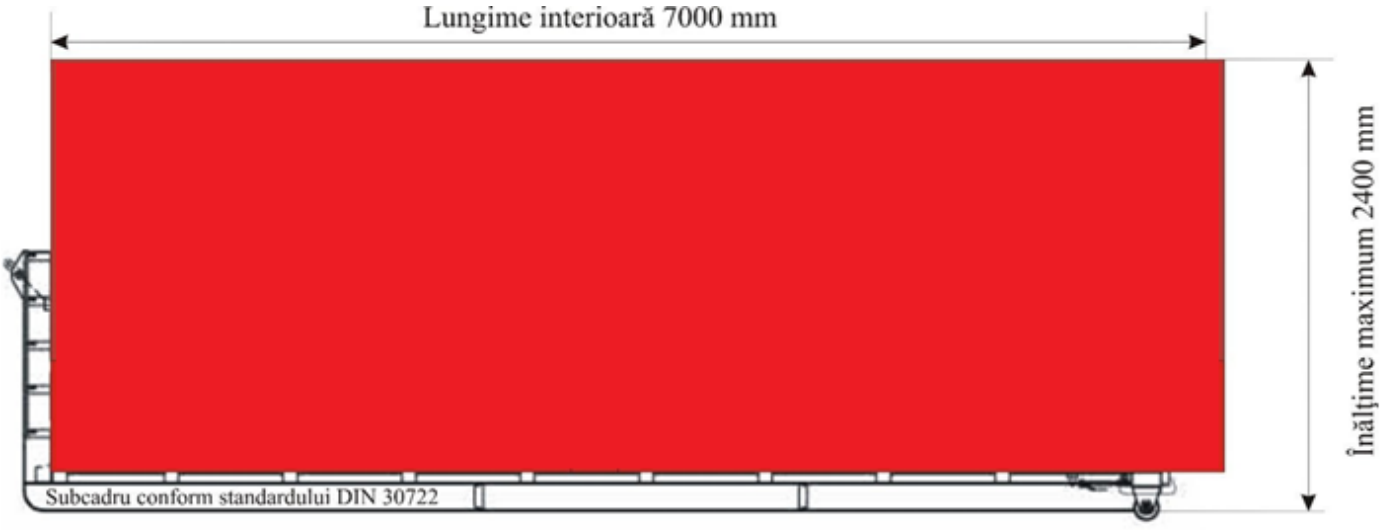
5.10. EN 60598 - Luminaires - General requirements and tests

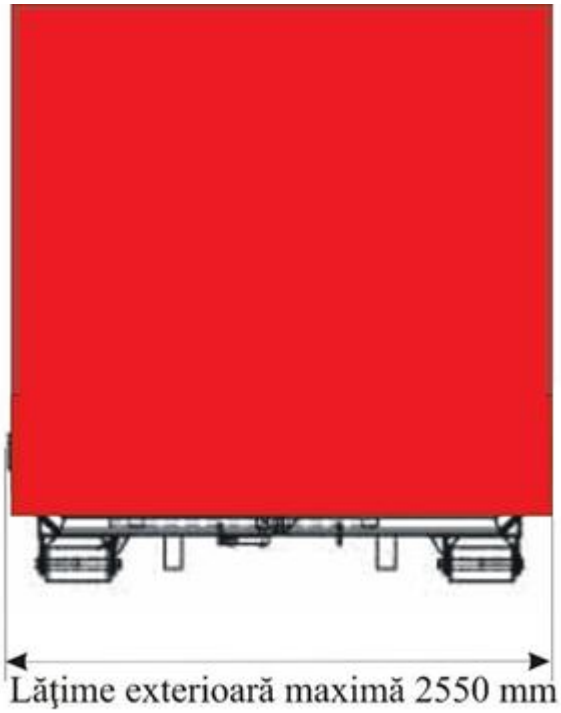
5.11. EN 62031 - LED modules for general lighting - Safety specifications

5.12. EN 1838 - Emergency lighting - Application of emergency lighting

5.13. EN 1307 – Rubber and plastics hoses – Dimensions, tolerances and determination of length

5.14. EN 1402 – Rubber and plastics hoses – Hydraulic pressure test methods
5.15. EN 8033 – Rubber and plastics hoses – Determination of flexibility
5.16. EN 4649 – Rubber – Determination of abrasion resistance
5.17. EN 4081 – Rubber hoses for cooling systems – Resistance to ozone and fluids
5.18. EN 12115 – Rubber hoses for the transfer of chemical and industrial fluids – Safety and performance requirements
5.19. EN 14420 – (Hose fittings and couplings)





Example similar to:

Annex No. 3
according to technical specifications

TELESCOPIC LIGHTING MAST

Minimum technical requirements:

- Integrated as a fixed component of the container;
- Fully electropneumatic drive;
- Electrically controlled (12/24V, DC or 220V, AC) via a wired remote control with a cable length of at least 5 meters;
- The power supply must be provided from both the vehicle's electrical system and the generator;
- Telescopic mast cylinders made of anodized aluminum;
- Lamp rotation in vertical plane: 315°;
- Lamp rotation in horizontal plane: 360°;
- Equipped with four (4) LED lamps/projectors, each with a minimum output of 12,000 lumens, which emit cool white light and provide protection against accidental impacts;
- Minimum height from the ground (when the container is on the vehicle chassis): 5,000 mm;
- Automatic return to transport position.

Annex No. 4
according to technical specifications

HOSES AND ACCESSORIES COMPARTMENT

No.	Product name	Amount	Technical details
1.	Rubber coated discharge hose for water transport	50 pieces	- Equipped at both ends with standardized Storz couplings - Large diameter (8” = 204 mm) - Length: 20 meters - Burst pressure: ≥35 bar - Hose color: Black - High resistance to: ozone, abrasion and heat
2.	One-way valve	2 pieces	- Standardized Storz couplings - Large diameter (8” = 204 mm) - High resistance to: ozone, abrasion and heat
3.	Adapter (8” = 204 mm) x (6” = 152 mm)	2 pieces	- Standardized Storz couplings - High resistance to: ozone, abrasion and heat
4.	Hose Bridge/Ramp, set for hoses up to (8” = 204 mm)	2 sets	- 4 pcs. Ramp segments made of recycled plastic - 3 pcs. Aluminum pressing sections (1 center piece + 2 end pieces) - 2 pcs. Ramp spacer section, for extending ramps to allow passage for vehicles with lower ground clearance (connecting parts must be included).
5.	Coupling wrench (8” = 204 mm)	10 units	- For standardized Storz couplings - Large diameter (8” = 204 mm) - High resistance to: ozone, abrasion and heat

Annex No. 5
according to technical specifications

TECHNICAL SPECIFICATIONS
"High capacity pump"

1. DESTINATION

1.1. The high-capacity pump is a self-priming, trailer-mounted diesel engine pump designed to evacuate dirty water and liquids with solid content, for flood response operations, industrial accidents, or other emergency situations requiring rapid evacuation of liquids.

1.2. The entire contents of the High Capacity Pump will be subject to a verification program developed by the specialists of the General Inspectorate for Emergency Situations together with those of the supplier, before initial delivery. The purpose of this process is to determine whether it meets the technical and tactical performance requirements stipulated in the current technical specifications.

2. APPROVAL AND CERTIFICATION

The high-capacity pump must be manufactured in accordance with the applicable European directives and regulations and must bear the CE conformity marking. It must be accompanied by a Declaration of Conformity and a Quality Certificate, issued by the manufacturer and supplier under their own responsibility.

3. GENERAL REQUIREMENTS

3.1. The equipment will be delivered fully assembled, functional and ready to use;

3.2. All components must bear the CE marking and comply with the relevant European standards;

3.3. The pump must be self-priming and be able to prime automatically in the event of loss of suction;

3.4. The supplier will provide:

- Minimum 24-month warranty;
- Training for the beneficiary on operation and maintenance;
- Two monitoring visits to the production unit;
- Complete technical documentation in Romanian (manuals, diagrams, spare parts list);

3.5. The equipment and accessories installed and/or supplied with the vehicle must comply with the standards listed in point 5.

4. TECHNICAL CHARACTERISTICS OF THE PUMP AND TRAILER

4.1. Minimum technical characteristics of the pump

4.1.1. Minimum flow rate: 1100 m^3/h;

4.1.2. Minimum height: 40 m;

4.1.3. Maximum size of solid particles: 50 mm;

4.1.4. Minimum liquids supported: dirty water, suspensions, sludge;

4.1.5. Sealing: mechanical;

4.1.6. Pumped liquid temperature: 0°C – 40°C;
4.1.7. Ambient operating temperature: -15°C to +40°C;
4.1.8. Engine type: Diesel.
4.1.9. The engine must be started exclusively from the battery;
4.1.10. Water pump connections
4.1.10.1. Inlet: 300 mm; (for absorption)
4.1.10.2. Outlet: Standardized large diameter Storz couplings (8” = 204 mm)
4.2. The pump must be mounted on a heavy 4-wheel trailer;
4.3. The trailer must include:
4.3.1. Electrical connection system compatible with signal lights (7 and 13 pin plug)
4.3.2. Interchangeable tow hooks for compatibility with both trucks (standard bolt-on coupling) and cars (ball coupling type B or C)
4.3.3. Protective structure in the form of a metal casing or waterproof and UV-resistant tarpaulin;
4.3.4. The casing must be equipped with a lifting hook with the help of the manipulator in case of need;
4.3.5. Dedicated spaces for mounting a filter and four suction hoses with a diameter of 300 mm, each with a minimum length of 4 meters;
4.3.6. Command and control panel;
4.3.7. Battery box with cables;
4.3.8. IP 68 LED lights mounted on the housing for illuminating the work area at night;
4.3.9. Fuel tank with a minimum capacity of 300 liters;
4.3.10. Maximum permitted speed on public roads, according to legal regulations (80 km/h)
4.4 The pump in the set must be equipped with a filter and four suction hoses with a diameter of 300 mm, each with a minimum length of 4 meters mounted on the trailer..

5. LIST OF RELEVANT STANDARDS

5.1. EN 809 – Safety requirements for pumps and pumping units for liquids
5.2. EN 9906 – Hydraulic performance acceptance tests for rotodynamic pumps
5.3. EN 5199 – Technical specifications for class II centrifugal pumps
5.4. EN 60204-1 – Electrical equipment of machines – General requirements
5.5. EN 13849-1 – Safety-related parts of control systems – Design principles
5.6. EN 45545 – Fire protection
5.7. EN 1991 – Structural Load Design
5.8. EN 1090 – Execution of steel structures
5.9. EN 60598 – Lighting systems
5.10. EN 12642 – Securing of cargo on vehicles (applicable if the pump is mounted on a mobile platform/trailer)