**RESTRICTED TENDER TECHNICAL SPECIFICATION FOR A TRUCK WITH A TRAILER**

1. **General part:** 
   1. The truck with a trailer (hereinafter – semi-trailer) intended for logistical purposes is designed for use in military logistical operations, as well as for preparing for military operations and performing other defence-related functions. The truck with the semi-trailer must be new and unused.
   2. The truck with the semi-trailer must be new and manufactured no earlier than 12 months prior to the signing of the contract.
   3. The truck with the semi-trailer must be capable of transporting self-propelled PzH 2000 howitzers, Leopard 2 tanks, Bergepanzer 2 recovery tanks, and other heavy and oversized equipment.
   4. Up-to-date, in accordance with the manufacturer’s specifications and equipment, complying with national and/or EU standards, meeting all occupational safety and road safety requirements. Fully equipped (base vehicle with factory standard equipment), suitable for operation in high and low temperature.
   5. The truck with superstructure and cargo design, along with conformity certificates, must comply with the requirements of Annex B, Part 9 of the European Council Directive 94/55/EC of 21 November 1994 (last amended by Directive 2006/89/EC of 3 November 2006), concerning vehicles intended for the transport of dangerous goods by road.
   6. The truck must be safe to operate on public roads within the European Union or at least one NATO member state that is not a member of the European Union. The truck’s design must comply with European Parliament and Council Directive No. 2007/46/EC of 5 September 2007, including all its subsequent amendments and exemptions, or with equivalent standards of at least one NATO member state that is not a member of the European Union.
   7. Wheel formula not less than 8x8.
   8. The total technical registered mass of the truck shall be no less than 35 tonnes, and the total technical registered mass of the combination shall be no less than 120 tonnes.
   9. The threaded connections and measuring scales of the truck shall be in the metric system.
   10. The truck is designed for right-hand traffic, with the steering wheel on the left side.
2. **Requirements for the truck:**
   1. **Operating environment:**
   2. **Requirements for the cab:** 
      1. **Ergonomics:** 
         1. Supports and handholds must be fitted to allow easy entry and exit from the truck cabin.
         2. The truck cabin must have 3 seats. The middle seat shall be a folding seat and shall be fitted with a standing platform when a hatch is used, or a similar 3-seat solution with a separate standing platform.
         3. The seat shall be adjustable forwards, backwards, upwards, downwards and shall have a weight adjustment of up to 120 kg, so that the driver can effortlessly reach all the instruments necessary for the operation of the towing vehicle while seated in the seat. The driver’s seat shall be air-suspended.
         4. The truck cabin shall be equipped with a G-36 automatic rifle holster (a universal holster suitable for other automatic rifles) for each crew member and shall be easily accessible from the seating position.
         5. The truck cabin shall be equipped with spaces for stowing ammunition and equipment. Personal equipment shall be easily accessible, placed and removed from its designated place.
         6. At least 2 easily attachable and detachable yellow LED beacons shall be fitted on the roof of the cabin, illuminated 360 degrees on their axis.
         7. The truck cabin shall provide space for the installation of the Lithuanian Armed Forces Very High Frequency Radio (RF 7800 V), as well as space for the radio antenna and openings for the radio wiring. The radio integration solution (e.g. location in the cab) shall be agreed with the buyer at the time of manufacture.
         8. The outer part of the cabin shall be equipped with an antenna mounting bracket for the radio.
      2. **Force protection:**
         1. Seat belts and head restraints must be fitted.
         2. A fully openable and/or hinged circular firing hatch must be installed on the roof of the truck cabin, centered above the cabin. Above the roof hatch, there must be a support and a rotary ring mount designed for securing 7.62 mm FN Minimi (MK3 Tactical) and 5.56 mm FN Minimi machine guns. The mount must feature an adjustable recoil buffer. All structural strength and durability must be sufficient to withstand the recoil force when firing this machine gun. The machine gun firing arc must be 360°. The set shall include a detachable tripod compatible with existing mount.
         3. The truck cabin must be designed to accommodate additional armoured protection against mines and ballistic threats, meeting STANAG 4569 or equivalent requirements, or the truck chassis must be adapted to allow swapping the unarmoured cabin for an armoured cabin compliant with STANAG 4569 or an equivalent standard.
         4. The towing vehicle must have space for a fire extinguisher (mounted in a special fire extinguisher box on the outside of the vehicle). The fire extinguisher shall not be less than 6 kg. The extinguisher shall be supplied by the supplier.
         5. A first aid kit shall be provided inside the cabin. The first aid kit shall be supplied by the supplier.
      3. **Heating and air conditioning system:**
      4. The truck must be equipped with a heating and air-conditioning system of at least 3.5 kW. The heating equipment shall provide:
         1. a cabin interior temperature of at least +12°C when the truck is operated at -32°C.
         2. a cabin internal temperature of not more than +32°C when the truck is operated at +49°C.
   3. **Engine:**
      1. Must meet at least EURO 3 standard.
      2. The engine power must be at least 500 kW (tolerance up to 10%).
      3. It must start without any additional equipment or preparation at a maximum air temperature of -20°C. If the towing vehicle does not start at -32°C without additional equipment, the supplier shall provide additional equipment to start the towing vehicle at -32°C (the preparation shall not take more than 60 minutes).
      4. The air intake to the engine must be cyclonically pre-cleaned.
      5. Must use diesel fuel.
   4. **Gearbox:**
      1. It must be automatic, with at least 12 gears, with the possibility of manual gear changes.
      2. It must have a low-range gear.
   5. **Chassis:** 
      1. The truck is all-wheel drive. There must be at least 4 drive axles. A differential locking system shall be fitted to all wheel axles. The axle locking system shall be controlled from the cab for all drive axles and for the differentials between drive axles.
   6. **Wheels and tyres:**
      1. Wheels with matching tyres (including spare wheel) not less than 14.00R20 or equivalent. It must be possible for the driver to change the wheel without additional assistance from other soldiers.
      2. A Semi - Automatic Tire Inflation System must be fitted.
      3. All tyres (including the spare) must be fitted with Run Flat tyre inserts.
      4. The towing vehicle's spare wheel attachment must be mounted behind the cabin. The lowering winch of the spare wheel shall be operated hydraulically by push buttons (not mechanically), that is, the spare wheel shall be lowered/lifted by means of a hydraulic device.
      5. The back-up lowering mechanism shall operate independently of other equipment and shall be equipped with a safety lock/mechanism to prevent accidental or involuntary lowering of the winch.
      6. The spare wheel must be delivered by the supplier with the truck.
      7. The mudguards of the second and subsequent axle wheels must be made from ribbed aluminium sheet no less than 4 mm thick, welded. The upper part of the mudguards must be flat. Tandem mudguards (a single mudguard covering all wheels) must be installed at the rear. The vehicle’s side marker lights must be integrated into the mudguards.
   7. **Brakes:**
      1. The truck shall be equipped with a braking system with anti-lock braking system (ABS) and parking brake.
      2. An electronic braking system (EBS) must be fitted.
      3. All brakes must be drum brakes.
   8. **Electrical system:** 
      1. A 24 V electrical installation complying with STANAG 2601 or equivalent must be installed.
      2. The generator must have a rated current of at least 150 A and an output of at least 3500 W.
      3. The truck cabin shall be equipped with at least one DC 24 V and 12 V socket outlet for charging appliances.
      4. The truck shall be equipped with a socket for the external ignition connection (in accordance with STANAG 4074 or equivalent) and a cable of at least 6 metres in length.
      5. Batteries complying with STANAG 4015 or equivalent standard must be inserted.
      6. Automatic fuses must be installed instead of standard (melting) fuses.
      7. Automatic switching on/off of batteries from the driver's cabin with manual switching on/off outside shall be installed.
      8. The truck shall be equipped with a 360-degree camera system, with a brightness of at least 400.00 cd/m², complying with IP40/IP69 or equivalent immunity class, connected to a separate screen of at least 7" HD resolution.
   9. **Lights:** 
      1. Standard headlamps protected by a grille shall be fitted.
      2. Rear lights must be protected by a grille.
      3. Side and rear position lamps must be fitted.
      4. All electrical equipment on the towing vehicle must be protected, that is, weatherproof.
      5. The truck shall be fitted with a headlamp light masking device conforming to STANAG 4381 or an equivalent standard approved by another NATO country. It shall also be fitted with protective grilles for the headlamps.
      6. The cabin shall be equipped with a reading lamp. A switch for the control and complete disconnection of all the towing vehicle's lights, accessible to the driver in accordance with STANAG 4381 or equivalent, shall be fitted.
      7. The truck must be equipped with an external lighting system designed for operation during darkness, comprising at least 10 work lights, including 2 behind the cabin, 2 at the cabin access steps (one on each side), 2 on top of the cabin illuminating rearwards or sideways (adjustable), and 2 at the rear that automatically switch on when reverse gear is engaged. The external lighting system must be able to be installed and removed within 5 minutes. The work lights must be protected by grills.
      8. All work lights must have 360º rotation capability, with the option to switch on each side, front, and rear of the truck separately. All lights must be certified for electromagnetic compatibility.
      9. The truck must be equipped with at least 12 flashing warning lights (blitz lights) to alert other road users of an oversized load. At least 6 lights must be installed on the front grille of the vehicle, and at least 4 lights must be installed at the rear of the cabin.
   10. **Requirements for fuel tanks:** 
       1. The construction of the truck’s fuel tanks must include locks and allow refuelling both using a fuel nozzle handle (adapter) and by pouring fuel from jerry cans (in accordance with STANAG 3756 or an equivalent standard).
       2. The truck must be equipped with a lockable box designed to carry three 20-litre fuel cans, which the supplier must deliver together with the truck. The cans must be separated from each other by dividers, and the interior of the box must be lined with rubber.
       3. The colour of the fuel canister box (both inside and outside) and the canisters must conform to RAL 6031-F9 or an equivalent standard.
       4. The fuel tank capacity shall not be less than 700 litres.
   11. **Mobility:** 
       1. The truck must be capable of ascending and descending a slope of at least 60% on a firm and dry surface, and also be able to traverse longitudinally a slope of at least 30% on a firm and dry surface. It must be able to stop and remain stationary on such a slope (using the handbrake), and must be able to start moving again from that position and successfully overcome the slope.
       2. The angle of approach of the truck shall be at least 30° without taking into account the influence of the front winch on this parameter.
       3. The angle of departure of the truck must be at least 28°.
       4. The towing vehicle shall clear a water obstacle of at least 0,75 m without additional preparation.
       5. The truck must clear a vertical obstacle (staircase) of at least 450 mm.
       6. The truck shall be able to negotiate a trench with a minimum width of 900 mm.
       7. It shall have a load marking according to STANAG 2021 AEP-3.12.1.5 or equivalent.
   12. **Evacuation:** 
       1. The towing vehicle must have an auxiliary towing mechanism (winch) that can pull the trapped towing vehicle. The winch shall have a capacity of not less than 125 kN, a winch rope length of not less than 40 m and a galvanised rope.
       2. The winch shall be covered with a green (cabin) camouflage material.
       3. The truck must have a rigid towbar suitable for towing another truck of the same type. The rigid towbar must be installed/attached in such a way that it is fully protected against dirt/water. The truck shall have all the couplings and brackets necessary to tow another similar vehicle and to be towed by the rigid towing vehicle of another similar vehicle.
       4. The Supplier shall provide two emergency signs (warning triangular reflectors placed on the road).
   13. **Pulling/Towing:** 
       1. The truck shall be fitted with a hydraulic double winch capable of towing heavy machinery weighing at least 80 tonnes that has broken down on a semi-trailer. The hydraulic winch system must be capable of safely loading and unloading any type of tracked vehicle (with moving tracks), whether broken or damaged and unable to move on its own, or undamaged and able to move, onto a semi-trailer attached to the truck.
       2. The winch of a dual system must operate independently of each other.
       3. Hydraulic winches shall operate at a minimum of two speeds.
       4. The winch clutch must be pneumatic.
       5. The hydraulic oil tank shall have a filtration system and an oil temperature and level indicator.
       6. Each winch shall have a pulling force of not less than 390 kN (lower level when the cable is fully extended).
       7. The pulling force of each winch shall be not less than 245 kN at the upper level (with the cable wrapped around the drum in four layers).
       8. The winch remote control shall have a range of at least 20 m.
       9. The towing rope shall be steel, not less than 28 mm thick and not less than 40 m long.
       10. A visibility-restricting visibility shield for the winch operator shall be fitted.
   14. **Transportability:**
       1. The truck shall be suitable for transport by rail, ship and allied aircraft (A400M, C-17) and shall be equipped with the necessary attachments (for transport, loading and unloading) in accordance with STANAG 4062, STANAG 7213 or equivalent standards
   15. **Coupling devices:** 
       1. A 3.5-inch semi-trailer coupling must be fitted to the truck frame.
       2. The truck shall be suitable for towing trailers and shall be equipped with couplings and means of towing complying with STANAG 4007 or equivalent standards (the arrangement of the couplings to be agreed with the purchaser at the time of manufacture).
       3. A trailer coupling complying with STANAG 4101 or equivalent standard shall be fitted at the rear of the truck.
   16. **Other:**
       1. Before production can start, a drawing must first be agreed with the buyer.
       2. The truck must be fitted with a lockable storage box designed to hold additional equipment and tools. The storage box must be made of stainless steel and include a pull-out drawer with a permissible load of no less than 200 kg. The interior of the storage box must be lined with moisture-resistant plywood. The storage box must be ventilated during summer and heated during winter. The dimensions of the storage box must be agreed upon with the purchaser during production.
       3. The truck must be fitted with at least three storage boxes of different sizes (as large as possible) for storing additional equipment and tools. The storage boxes must be made of stainless steel and have a permissible load of no less than 500 kg. The storage boxes must be ventilated during summer and heated during winter. The dimensions of the storage boxes must be agreed upon with the purchaser during production.
       4. The storage compartments shall be of sufficient size to accommodate all necessary load securing straps, chains, slings, etc.
       5. The vehicle’s registration number must be clearly visible.
       6. Spherical, electrically adjustable, and heated rear-view mirrors with extended holders and ramp mirrors shall be fitted. All mirrors shall be capable of being folded into the cabin.
       7. All information signs, markings, inscriptions and pictograms on the towing vehicle, its components and equipment, inside and outside, must be in the Lithuanian language (with the exception of serial components produced by subcontractors).
       8. The truck superstructure must be manufactured at a factory where a quality management system compliant with LST EN ISO 9001:2015 or an equivalent quality management system standard is implemented.
       9. The truck superstructure must be manufactured at a factory with an environmental protection management system implemented in accordance with LST EN ISO 14001:2015 or an equivalent environmental protection management system standard.
   17. **Painting, anti-corrosion coating:** 
       1. The truck shall be painted matt bronze green (RAL 6031-F9) in accordance with STANAG 4360 or equivalent. The frame, frame mounts and wheels shall be black or grey.
       2. Paints shall have anti-corrosive properties.
       3. All steel parts of the superstructure shall be metallised (minimum 85% zinc) before priming and painting.
       4. Glossy parts shall be painted matt green or matt black.
       5. All aluminium parts of the superstructure shall be anodised black.
       6. The chassis must have an anti-corrosion coating.
       7. The supplier shall ensure that the truck is protected against corrosion for a period of at least 10 years.
   18. **Additional equipment:** 
       1. The truck shall be equipped with a maintenance (level I repair) repair tool kit with a designated attachment/storage area for the driver. The kit shall also include the tools required for changing a tyre.
       2. Repair kit for simple repairs at the scene of a towing vehicle breakdown.
       3. Lift.
       4. Wheel support pads.
       5. Shovel for sand and snow.
       6. The upholstery of the driver’s and passenger’s seats shall be made of a durable material.
3. **Semi-trailer requirements:** 
   1. **Dimensions:** 
      1. The overall length of the semi-trailer must not be less than 16900 mm.
      2. The overall length of the gooseneck (from the front to the lower load platform) shall be at least 3500 mm.
      3. The front gooseneck shall be at least 660 mm.
      4. The rear gooseneck shall be at least 1100 mm.
      5. The height of the coupling point shall be 1510 mm ± 40 mm when the semi-trailer is loaded.
      6. The length of the underfloor cargo platform shall not be less than 12800 mm.
      7. The rear slope at the rear of the semi-trailer shall be not less than 300 mm / the angle of inclination not more than 10.0°.
      8. The turning circle of the truck under the semi-trailer shall be at least 2500 mm.
      9. The width of the low-bed cargo platform must be no less than 2,750 mm.
      10. The side extensions must be metal with a non-slip surface, at least 220 mm wide on each side.
      11. The total width including the side extensions must be no less than 3,150 mm.
      12. The width of the raised section of the platform must be no less than 2,480 mm.
      13. The loading height of the cargo platform raised to the average transportation level must be no less than 900 mm.
      14. In the lowered transport position, the cargo platform loading height (limited platform height under a bridge) must not exceed 850 mm.
      15. The distance between the axles must be no less than 1,360 mm.
      16. The technically permissible axle load on each axle must be no less than 12,000 kg.
      17. The registered axle load on each axle must be no less than 11,500 kg.
      18. The technical weight of the semi-trailer must be no less than 120,000 kg.
      19. The registered weight of the semi-trailer must be no less than 115,000 kg.
      20. The technical load on the fifth wheel must be no less than 24,000 kg.
      21. The registered load on the fifth wheel must be no less than 22,000 kg.
      22. The technically permissible total axle load must be no less than 96,000 kg.
      23. The registered total axle load must be no less than 92,000 kg.
      24. The unladen weight of the semi-trailer must not exceed 34,100 kg.
      25. The technical payload capacity of the semi-trailer must be no less than 92,600 kg.
      26. The registered payload capacity of the semi-trailer must be no less than 87,600 kg.
      27. Operating temperature range: from -32°C to +49°C.
      28. The load capacity of the hydraulically raised section of the platform must be no less than 20,000 kg.
      29. The frame of the raised section of the platform (gooseneck) must be reinforced and welded from high-quality structural steel.
      30. There must be an automatic hydraulic system for the raised section of the platform (gooseneck).
      31. There must be the possibility to manually adjust the height of both the raised section of the platform and the low-bed cargo platform using buttons and a remote control in order to increase ground clearance.
      32. A 3.5-inch coupling pin must be installed.
      33. At least one pair of swivels lashing rings with a load capacity of no less than 20,000 daN must be installed on the raised section of the platform.
   2. **Semi-trailer chassis:** 
      1. Reinforced, welded semi-trailer chassis with a central beam made of high-quality structural steel.
   3. **Low-bed cargo platform:**
      1. ​Welded steel construction with reinforced cross members.
      2. Reinforced steel structure designed for transporting loads with high wheel loads (e.g., container handlers).
      3. The platform floor is made of steel.
      4. At least two pairs of swivels lifting lugs are installed.
      5. At least two pairs of 40-foot container locks are installed.
      6. At least two pairs of 20-foot container locks are installed.
   4. **Loading ramps:** 
      1. Double ramps must be folded in half in the transport position.
      2. Hydraulic ramp lifting and lowering control and lateral movement must be performed using a remote control and a stationary control panel at the rear of the semi-trailer.
      3. The angle of lowered ramps on the road surface shall not exceed 13°.
      4. The length of ramps shall be at least 4200 mm.
      5. The width of ramps shall be at least 800 mm.
      6. The maximum permissible load must be at least 80,000 kg per pair.
      7. Lateral displacement is performed hydraulically.
      8. Ramps shall have rubber flooring on the inside and welded steel strips on the outside.
      9. It must be possible to additionally secure the ramps in the transport position.
   5. **Front supports:**
      1. Mechanically retractable supports must be installed to allow the loaded semi-trailer to be parked without the truck.
   6. **Rear supports:**
      1. Rear hydraulic supports must be installed to stabilize the rear part of the semi-trailer during the lifting of a load of up to 80,000 kg.

**3.6.2.** ​ The supports must be operated using both a remote control and a stationary control panel located at the rear of the semi-trailer.

* 1. **Chassis:**
  2. There must be at least 8 axles.
     1. Separate (independent) axles with integrated brake and hub systems must be installed.
     2. The technical load capacity of each axle must be no less than 12,000 kg.
     3. Anti-lock braking and stability systems must be integrated.
     4. Axle steering must be carried out with the help of hydraulics. ​
  3. **Tires:** 
     1. At least 34 tires must be installed, with dimensions no less than 245/70 R 17.5, mounted on steel rims with dimensions no less than 17.5 x 6.75 (including two spare tires with rims).
     2. Mandatory marking on the tire: snowflake on mountain symbol (3PMSF).
  4. **Suspension:** 
     1. The semi-trailer must be equipped with independent hydraulic suspension on both sides.
     2. The hydraulic suspension travel must be no less than 320 mm.
     3. The driving height must be adjustable via remote and stationary control panels located on the raised platform section, within a specified allowable range.
  5. **Axle lifting and jack functions:**
     1. The 1st and 2nd axles must be lifted using double-acting hydraulic cylinders.
     2. It must be possible to lift each axle using a valve.
     3. It must be possible to lift and lower the axle for tire replacement.
     4. The semi-trailer lifting must be performed so that when changing tires, the damaged tire hangs freely in the air without touching the ground.
  6. **Hydraulic steering system for the semi-trailer axles:** 
     1. The steering angle of the last axle wheels must be no less than 55°.
  7. **Operation of hydraulic functions:**
     1. The semi-trailer hydraulic system must be connected to the hydraulic system installed on the truck.
  8. **Semi-trailer control operating system (CAN BUS):** 
     1. All semi-trailer hydraulic functions must be controlled by separate control panels.
     2. Stationary control panels must be mounted on the side of the raised platform section, between the axles, or at the rear of the semi-trailer.
     3. Steering, axle level adjustment, and suspension functions must be controlled by both stationary and remote-control panels.
     4. The driving height level must be indicated by LEDs on the control panels.
     5. Automatic semi-trailer lifting and lowering must be provided.
  9. **LED sensor for zero position of the truck combination:** 
     1. The semi-trailer must be equipped with an LED sensor and a monitor displaying the zero position (when the truck and semi-trailer are aligned longitudinally).
  10. **The semi-trailer must be equipped with radio control featuring a data transmission system (CAN BUS) and capable of controlling the following functions:** 
      + 1. Steering left/right.
        2. Raising/lowering of driving height.
        3. Raising/lowering of the cylinders in the raised platform section.
        4. Control of ramp displacement to the left and right, as well as raising and lowering.
        5. Control of the rear hydraulic supports located on the left and right - up and down.
      1. **Information that must be displayed on the radio-controlled panel:** 
         1. Steering positions: left, right.
         2. The automatic driving height must have at least 3 levels.
  11. **The semi-trailer must be equipped with an information system with a monitor mounted on the semi-trailer, designed to display the following data from the EBS system:** 
      + - 1. Total mileage.
          2. Daily mileage.
          3. Fault code indicator.
          4. Axle loads.
  12. **Braking system:** 
      1. Electronically controlled 2-line pneumatic brake system with ABS and RSS.
  13. **Brake connections:** 
      1. Brake connections conforming to ISO 1728 or an equivalent standard must be installed at the front of the semi-trailer.
  14. **24V lighting system complying with the requirements of Directive 76/756/EEC or an equivalent standard, consisting of:** 
      1. At least 2 LED multifunctional rear lights.
      2. At least 2 LED rear outline lights with integrated side marker lights (horns).
      3. LED side marker lights (yellow).
      4. At least 2 LED front outline lights (white).
      5. 1 set of LED white license plate illumination lights.
  15. **Front plug sockets:**
      1. A 15-pin plug socket must be installed at the front of the semi-trailer.
      2. A 12-pin STANAG 4007 or equivalent standard socket must be installed at the front of the semi-trailer.
      3. A 7-pin EBS socket must be installed at the front of the semi-trailer.
  16. **Plug sockets for oversized load width signs:** 
      1. Electrical plug sockets must be installed at the front of the semi-trailer, on the left and right sides, for connecting oversized load width signs.
      2. Electrical plug sockets must be installed at the rear of the semi-trailer, on the left and right sides, for connecting oversized load width signs.
      3. An electrical plug socket must be installed at the rear of the semi-trailer for connecting the oversized length sign.
  17. **Beacon connection socket:** 
      1. An electrical socket must be installed for beacon connection on the rear of the semi-trailer.
  18. **Semi-trailer connections with the truck:** 
      1. All necessary electrical, brake, and hydraulic connections between the truck and the semi-trailer must be provided.
  19. Side protection against slipping must be installed.
  20. **Splash protection:**
      1. Splash guards must be fitted behind the last axle.
  21. **Central lubrication system:**
      1. A central lubrication system must be installed for the lubrication points of the raised platform section, steering and suspension.
      2. Oil dosing must be performed depending on the driving speed and duration.
      3. One grease pump shall be installed in the raised platform section and at least one at the rear.
      4. External oil filling must be carried out through the oil filler nozzle.
  22. **Painting and anti-corrosion surface coating:**
      1. The non-slip coating must be integrated into the final coat of paint on the walking surfaces.
      2. The semi-trailer frame and platform must be coated with anti-corrosion coating and painted with RAL 6031 F9 CARC.
      3. Wheel rims must be painted RAL 6031 F9 CARC.
      4. Other parts of the semi-trailer shall be painted in RAL 7021 matt color.
      5. Axles must be coated with KTL coating and painted matte black.
      6. The fastening loops must be zinc-coated and painted RAL 6031 F9 CARC.
  23. **Storage compartments:**
      1. There must be (at least) two integrated storage compartments.
      2. One storage compartment shall be made of steel, mounted on the front part of the raised platform, and lockable.
  24. **Wheel supports:**
      1. Four wheel supports with holders must be installed.
  25. **Rear view camera:**
      1. One rear view camera must be installed at the rear of the semi-trailer.
  26. **Work lights:**
      1. At least 2 LED reverse/working lights must be installed on the ramps. (activated with the reverse gear.)
      2. At least 2 LED working lights must be installed at the front of the semi-trailer.

At least 1 beacon must be installed at the rear of the semi-trailer.

* 1. **Warning signs for oversized cargo width:**
     1. Warning signs indicating the width of the oversized load must be installed on the right and left sides of the semi-trailer with integrated LED lights:
        1. The width of the warning signs distributed must be at least 3900 mm.
        2. One pair of warning signs must be installed at the front of the platform.
        3. One pair of warning signs must be installed on loading ramps.
  2. **Side extensions of low-floor platforms:**
     1. Extension supports designed to increase the width of the low-floor platform to at least 3150 mm in width shall be removed.
     2. Distribution cover plates with a designated storage/transportation location on the raised platform section must be provided.
  3. **Installed towing loops:**
     1. Two towing eyes, each with a minimum load capacity of 20,000 daN, shall be fitted to the rear of the semi-trailer.
     2. Two towing loops must be installed on the raised platform section, each with a minimum capacity of 20,000 daN.
  4. **Spare wheel holders:**
     1. There must be two spare wheel holders for the semi-trailer and truck wheels, mounted at the front of the raised platform, with one mechanical lift.
  5. **Audio signal:**
     1. The audible signal must be activated when reverse gear is engaged. When reverse gear is engaged, the warning audible signal must be activated.
  6. **Cargo securing equipment:**
     1. 2 pcs. of balancers with clamps, with a load capacity of not less than 32000 daN.
     2. 2 pcs. of 16 mm fastening chains with a locking pin, with a load capacity of not less than 20,000 daN.
     3. 4 pcs. of 13 mm fastening chains (long) with a locking pin, with a load capacity of not less than 16000 daN.
     4. 4 pcs. of 13 mm fastening chains (short) with a tightening buckle, with a load capacity of at least 16,000 daN.
     5. 4 pcs. of holding loops (LC) with a fastening force of not less than 50000 daN.
     6. 4 pcs. holding loops (LC) with a fastening force of not less than 25 t.
     7. 4 pcs. holding loops (LC) with a fastening force of not less than 20000 daN.
     8. 2 pcs. cargo wedges, with a load capacity of at least 10,000 daN (for wheeled or tracked vehicles).
  7. **Tools:**
     1. A wheel wrench must be provided with the semi-trailer.
  8. **Other:**
     1. The location of the centre of gravity of the load must be clearly marked.
     2. A loading diagram must be provided.
     3. All warning labels on the semi-trailer must be in English and/or Lithuanian.
  9. **ADR**:
     1. Components installed in the semi-trailer must comply with the currently applicable requirements for the transport of dangerous goods (ADR).

1. **Documentation:**
   1. The manufacturer/supplier must provide technical maintenance and user instructions for the truck and semi-trailer in English and Lithuanian, printed and on electronic media – one set for each set.
   2. The manufacturer/supplier must provide instructions for preparing the truck and semi-trailer for transport and securing them on aircraft, ship decks, and rail car platforms (indicating the securing points).
2. **Warranty and compatibility:** 
   1. The factory warranty for a truck unit with a semi-trailer must be no less than 2 years or 20,000 km (whichever comes first), calculated from the date of signing the acceptance and transfer act.
   2. All technical maintenance (preventive maintenance) during the warranty period shall be performed at the expense of the manufacturer/supplier.
   3. The manufacturer/supplier shall ensure that all materials and parts supplied comply with the specifications and requirements under the contract during the warranty period.
   4. The manufacturer/supplier must provide training for truck and semi-trailer drivers. At least 10 people, in Lithuanian.
   5. The manufacturer/supplier must deliver the trucks with semi-trailers to the Lithuanian Armed Forces Vehicle and Equipment Depot Service (address: LT-45252, Kaunas, A. Juozapavičiaus pr. 11B, Lithuania) at its own expense.