*Annex 1 to the Request for Quotation – “Detailed description of the planned procurement order”*

**DETAILED DESCRIPTION OF THE PLANNED PROCUREMENT ORDER**

1. **GENERAL INFORMATION**
2. The object of the planned procurement order is the delivery of 6 intensive care sets and 16 non-intensive care beds with additional equipment for air medical evacuation, carried out as part of the grant project ***“Development and maintenance of rescEU transport and Logistics capacities in Poland”***, project number: 101105145.
3. As part of the planned procurement order, the Contractor is required to perform two tasks:
   * 1. **Task #1** – preparation of complete documentation necessary to obtain certification for the modification of aircraft in the ERJ190-200 model in the scope of installation of multifunctional intensive care stretchers and non-intensive care beds;
     2. **Task #2** – delivery (with transfer of ownership to the Contracting Authority) of 6 intensive care sets and 16 non-intensive care beds with additional equipment. The intensive care sets and non-intensive care beds will be part of the equipment of an aircraft used for medical air evacuation.
4. **TASK #1 – DESCRIPTION**

General requirements for the submission of documentation for modification:

* EASA STC or STC approved by FAA/ANAC with EASA validation, together with a permit for use on ERJ190-200 aircraft with serial numbers 19000415, 19000444, 19000462, 19000516
* SB (Service Bulletin) for installation with additional documents:
  + Set of installation drawings
  + W&B (Weight & Balance) calculation
  + Supplement to ELA (Electrical Load Analysis) in connection with additional medical equipment
  + LOPA (Location of Passenger Accommodations) for each configuration
  + EEL (Emergency Equipment Layout) adapted to the new configuration and layout of emergency equipment
  + Supplements to manufacturer documentation: AMM, AIPC, WM, MMEL, AFM, AOM
  + ICA (Instructions for Continued Airworthiness)
* SB for removal and restoration to the original configuration of the aircraft
* Aircraft dedicated for modification (MSN 19000415, 19000444, 19000462, 19000516) have a single-class configuration with 112 seats

Obraz zawierający tekst, zrzut ekranu, Czcionka, linia

Zawartość wygenerowana przez sztuczną inteligencję może być niepoprawna.

Each set ordered should have the following technical characteristics:

* Possibility of installation in Embraer ERJ190-200 aircraft within certified configurations in accordance with the Supplemental Type Certificate (STC), in various configurations of intensive care stations (no more than 6), non-intensive care beds (no more than 16) and seats (not less than 4). The Contracting Authority does not envisage the simultaneous installation of all intensive care stations and non-intensive care beds. The number of stations/beds installed will depend on the needs arising from the planned evacuation mission and the configuration of the aircraft cabin;
* No fewer than 2 seats for medical personnel in the vicinity of each intensive care station, positioned in such a way as to allow observation of the patient and medical equipment without having to unfasten safety belts;
* A device (e.g. a trolley) for moving stretchers with patients from the station to at least the aircraft door for loading and unloading patients;
* The Contracting Authority reserves the right to request no less than two (2) design consultations prior to the commencement of the station certification process;
* The final design must be approved by a representative of the Contracting Authority.

1. **TASK #2 – DESCRIPTION:**
   1. **Detailed description of the intensive care station**

The set of six (6) stations includes the following elements:

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| Item | Equipment | Number of devices to be purchases |
| 1 | Multifunctional intensive care stretchers. | 6 |
| 2 | Stretcher base with storage space. | 6 |
| 3 | Removable bridge attachable to the stretcher for securing medical devices. | 6 |
| 4 | Cardiac monitor/defibrillator. | 6 |
| 5 | Syringe infusion pump. | 13 |
| 6 | Transport ventilator. | 7 |
| 7 | 5L oxygen cylinder (not subject to this proceeding). | 12 |
| 8 | Oxygen concentrator. | 3 |
| 9 | Electric transport suction pump. | 7 |
| 10 | Passive oxygen therapy dispenser (depending on whether the condition in point 1.12 is met). | 7 |
| 11 | Device for loading and unloading patients on stretchers. | 1 |

Technical and clinical parameters of the set equipment:

Number of devices to be purchased: 6 (six)

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| **Intensive care station (PTU – *patient transport unit*)** | | |
| Item | Description of the object of the procurement order | Compliant Yes/No |
| 1.1 | Stretchers on a sturdy, lightweight frame made of aluminium and/or carbon composite and/or titanium alloy, designed for the transport of one patient under intensive care. |  |
| 1.1.1 | The stretchers have a mattress with an easily removable cover (easy to clean and disinfect, resistant to physiological fluids). The mattress should meet the requirements of EASA CS-25 Subpart D (CS 25.853) Part I Appendix F. |  |
| 1.1.2 | Back support with lift and lock function in angles ranging from flat to 60o (+/-5o), with at least one intermediate point, during take-off, flight and landing. |  |
| 1.1.3 | A patient restraint system with length adjustment on both sides of the fastenings, including at least 1 harness (4 or 5-point) and at least 2 two-point belts. The belts must have sewn-in labels with serviceability data, secured against removal/fading of the information contained therein. |  |
| 1.1.4 | Stretchers that can be attached to and detached from the station in an ergonomic manner without the use of additional tools. |  |
| 1.1.5 | An attachable bridge for mounting at least 1 cardiac monitor/defibrillator, 1 ventilator and 2 infusion pumps, certified at least for loading, unloading and continuation of transport by ground ambulance. |  |
| 1.2 | A mounting for the ventilator described in point 5, which is part of this procedure. |  |
| 1.3 | A mounting for the defibrillator/cardiac monitor described in point 3, which is part of this procedure. |  |
| 1.4 | A mounting for at least 2 syringe infusion pumps described  in point 4, which are part of this procedure. |  |
| 1.5 | A mounting for the electric suction pump described in point 6, which is part of this procedure. |  |
| 1.6 | Independent lighting of the stretcher working area with a power of not less than 300 lx and spot lighting illuminating an area with a diameter of not less than 20 cm with a power of not less than 400 lx – **SCORED PARAMETER.** |  |
| 1.7 | An electrical system with 230 VAC CEE7/7 sockets (or universal sockets compliant with the 7/7 standard or Europlug type), no less than 2 sockets; sockets must be labelled with information on voltage and maximum current and have an LED indicating power availability. |  |
| 1.8 | An electrical system with USB type C sockets, providing a voltage of 5 to 20 volts and a power rating of not less than 60 watts, not less than 2 sockets; sockets must be labelled with information on voltage and maximum current. |  |
| 1.9 | An electrical system with 12 VDC cigarette lighter sockets, no less than 3 sockets; sockets must be labelled with information on voltage and maximum current. |  |
| 1.10 | An oxygen system with mountings for 2 cylinders with a water capacity of 5 L with an integrated reducer, not part of this procedure, and presented by the Contracting Authority for design purposes. |  |
| 1.11 | No fewer than 2 AGA oxygen sockets located in the vicinity of the respirator mounting; the location of the sockets must not interfere with the fixed ventilator and oxygen dispenser. The Contracting Authority allows for the non-installation of AGA sockets, provided that the method and location of oxygen cylinders in the PTU allows for the connection of a respirator directly from the AGA cylinder socket using the supplied oxygen hoses, in a manner that does not hinder medical activities and does not interfere with other devices installed in the PTU. |  |
| 1.12 | A passive oxygen therapy dispenser, plugged directly into the AGA socket with an oxygen dosage range of not less than 0 to 15 L/min. The Contracting Authority allows for the non-delivery of the dispenser if the method and location of the oxygen cylinders allow for passive oxygen therapy for the patient to be connected directly from the cylinder flow meter in a manner that does not hinder medical procedures and does not interfere with other devices installed on the PTU. |  |
| 1.13 | A mounting for the oxygen concentrator described in point 7. The Contracting Authority allows the oxygen concentrator to be mounted interchangeably with the oxygen cylinder.  5 L. |  |
| 1.14 | Storage space in the form of drawers and/or shelves secured against falling out of objects, including at least one heated drawer for heating and maintaining the temperature of infusion fluids  at a temperature between 37 and 41 degrees Celsius. |  |
| 1.15 | A hanger for no less than two (2) drip bags. |  |
| 1.16 | The station must be capable of being mounted on board an Embraer 190 aircraft in “quick-change” mode and must be included in the Supplemental Type Certificate (STC). |  |
| 1.17 | Holders for medical equipment, including a defibrillator/cardiac monitor, ventilator, pumps and electric suction device. The mounting must comply with the requirements of EASA Part 21. Holders for a cardiac monitor/defibrillator, ventilator and infusion pumps must be capable of being attached to the patient station and to the attachable stretcher bridge. |  |
| 1.18 | AGA-DIN and DIN-AGA oxygen system adapters, 1 piece per station (6 AGA-DIN and 6 DIN-AGA). |  |
| Service | | |
| 1.19 | Manufacturer-authorised warranty service. |  |
| 1.20 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, the user manual and the service manual. |  |
| 1.20.1 | Free of charge inspections. |  |
| 1.20.2 | Inspections including travel or transport of the device to the service centre, labour and spare parts, consumables. |  |
| 1.21 | Warranty period: not shorter than until 31 August 2026. |  |
| 1.22 | Post-warranty service (inspections and repair of faults). |  |
| Documents (delivery to the Contracting Authority) | | |
| 1.23 | A PTU operating manual in Polish. |  |
| 1.24 | Certification in accordance with the Supplemental Type Certificate (STC). |  |
| Training | | |
| 1.29 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |

**2. Detailed description of the non-intensive bed**

The set of 16 beds includes the following elements:

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| Item | Equipment | Quantity |
| 1 | Multifunctional stretcher. | 16 |
| 2 | Single/double stretcher base. | 16/8 |
| 3 | Cardiac monitor/defibrillator. | 11 |
| 4 | A cabinet for storing medical equipment, including a suction pump, disposable materials (syringes, needles, gauze, gloves, etc.). | 4 |
| 5 | Transport suction pump. | 4 |
| 6 | An oxygen cylinder with a water capacity of 5 L (not subject to this proceeding). | 16 |

Technical and clinical parameters of the set equipment:

Number of devices to be purchased: 16 (sixteen)

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| **Non-intensive care bed** | | |
| Item | Description of the object of the procurement order | Compliant Yes/No |
| 2.1 | Stretchers on a sturdy, lightweight frame made of aluminium and/or carbon composite and/or titanium alloy, designed for transporting one patient. |  |
| 2.1.1 | The stretchers have a mattress with an easily removable cover (easy to clean and disinfect, resistant to physiological fluids). The mattress should meet the requirements of EASA CS-25 Subpart D (CS 25.853) Part I Appendix F. |  |
| 2.1.2 | Back support with lift and lock function in angles ranging from flat to 60° (+/-5°) with at least one intermediate point. |  |
| 2.1.3 | A patient restraint system with length adjustment on both sides of the fastenings, including at least 1 harness (4 or 5-point) and at least 2 two-point belts. The belts must have sewn-in labels with suitability data, secured against removal/fading of the information contained therein. |  |
| 2.1.4 | Stretchers that can be attached to and detached from the station in an ergonomic manner without the use of additional tools. |  |
| 2.1.5 | Stretchers installed in the aircraft in sets of 2, one above the other, i.e. 2 beds (stretcher sets) are mounted on one frame. **SCORED PARAMETER** |  |
| 2.2 | A mounting for the defibrillator/cardiac monitor described in **point 3**, which is part of this procedure. |  |
| 2.3 | A hanger for at least two (2) IV bags. |  |
| 2.4 | A holder for attaching a 5 L oxygen cylinder. |  |
| 2.5 | The bed must be capable of being secured on board an Embraer 190 aircraft in “quick-change” mode and must be included in the Supplemental Type Certificate (STC). |  |
| Service | | |
| 2.6 | Manufacturer-authorised warranty service. |  |
| 2.7 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, the operating manual and the service manual. |  |
| 2.7.1 | Free of charge inspections. |  |
| 2.7.2 | Inspections including travel or transport of the device to the service centre, labour and spare parts, consumables. |  |
| 2.8 | Warranty period: not shorter than until 31 August 2026. |  |
| 2.9 | Post-warranty service (inspections and repair of faults). |  |
| Documents (delivery to the Contracting Authority) | | |
| 2.10 | A PTU operating manual in Polish. |  |
| 2.11 | Certification in accordance with the Supplemental Type Certificate (STC). |  |
| Training | | |
| 2.12 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |

**3. Detailed description of the cardiac monitor/defibrillator:**

The cardiac monitor/defibrillator must be capable of being attached to an intensive care station (PTU) or a non-intensive care bed.

Number of devices to be purchased: 17 (seventeen)

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| **Cardiac monitor/defibrillator** | | |
| Item | Description of the object of the procurement order | Compliant Yes/No |
| 3.1 | A device enabling: monitoring of vital signs, defibrillation, cardioversion, external cardiac pacing of the patient. |  |
| 3.1.1 | Intended for use in all age groups (adults, children, newborns). |  |
| 3.2 | Medical devices must be brand new, manufactured no earlier than in the fourth quarter of 2024 or the first quarter of 2025. |  |
| 3.3 | The Contracting Authority does not accept reconditioned, ex-display, demonstration or used equipment. |  |
| 3.4 | A portable device suitable for transport with a patient: |  |
| 3.4.1 | Built-in handle (grip) for carrying. |  |
| 3.4.2 | Includes handles for attachment to a stretcher. |  |
| 3.5 | Degree of protection against external factors: minimum IP 55. |  |
| 3.6 | Device communication with the user in Polish. |  |
| 3.7. | Device functionality test: |  |
| 3.7.1 | Automatic daily. |  |
| 3.7.2 | Manual. |  |
| 3.7.3 | Report printout. |  |
| 3.8 | Operating conditions: |  |
| 3.8.1 | Temperature: minimum range from -10 °C to +50 °C. |  |
| 3.8.2 | Relative humidity, non-condensing: minimum range from 15 to 95%. |  |
| 3.8.3 | Altitude: minimum range from sea level to 2,500 m (non-hermetically sealed rooms). |  |
| 3.9 | Device weight with battery or battery pack (all battery slots filled), built-in carrying handle, printer with paper (1 roll) – maximum 7.5 kg. |  |
| 3.10 | Defibrillation/cardioversion. |  |
| 3.10.1 | Defibrillation modes: |  |
| 3.10.1.1 | Manual: synchronised and unsynchronised. |  |
| 3.10.1.2 | Semi-automatic with advisory mode (voice commands) in Polish. |  |
| 3.10.2 | Two-phase defibrillation wave. |  |
| 3.10.3 | Defibrillation energy delivered: minimum range from 2 to 200 J. |  |
| 3.10.4 | Defibrillation energy: minimum 10 levels. |  |
| 3.10.5 | Transcutaneous pacing: |  |
| 3.10.5.1 | Pacing of children and adults in asynchronous and on-demand modes. |  |
| 3.10.5.2 | Adjustable stimulation frequency: minimum range from 40 to 170 imp/min. |  |
| 3.10.5.3 | Adjustable current intensity: minimum range from 10 to 140 mA. |  |
| 3.11 | ECG monitoring. |  |
| 3.11.1 | ECG monitoring: basic or 12 leads. |  |
| 3.11.2 | Analysis and interpretation of the recording. |  |
| 3.11.3 | Adjustable ECG recording gain. |  |
| 3.11.4 | Detection and display of pacemaker pulses. |  |
| 3.11.5 | Heart rate: minimum range from 30 to 240 beats/min. |  |
| 3.12 | Saturation monitoring (SpO2). |  |
| 3.12.1 | Measurement using Masimo technology, resistant to interference. |  |
| 3.13.2 | Measurement: minimum range from 50 to 99%. |  |
| 3.13 | Monitoring of carboxyhaemoglobin (SpCO) and methaemoglobin (SpMet). |  |
| 3.14 | Capnography monitoring (etCO2). |  |
| 3.14.1 | In the sidestream: |  |
| 3.14.2 | Measurement of minimum etCO2 in the range from 1 to 95 mmHg. |  |
| 3.15 | Respiratory rate: minimum range from 2 to 100. |  |
| 3.16 | Monitoring of non-invasive blood pressure (NIBP). |  |
| 3.16.1 | Measurement mode: |  |
| 3.16.1.1 | Manual. |  |
| 3.16.1.2 | Automatic. |  |
| 3.16.2 | Time interval: minimum 5 intervals. |  |
| 3.16.3 | Oscillometric measurement. |  |
| 3.16.4 | Systolic pressure: minimum range from 40 to 230 mmHg. |  |
| 3.16.5 | Diastolic pressure: minimum range from 20 to 130 mmHg. |  |
| 3.16.6 | Mean pressure: minimum range from 30 to 180 mmHg. |  |
| 3.17 | Monitoring of invasive blood pressure (IBP). |  |
| 3.17.1 | Measurement: minimum range from -30 to 300 mmHg. |  |
| 3.17.2 | Manual zeroing. |  |
| 3.18 | Temperature monitoring. |  |
| 3.18.1 | Direct measurement method, minimum: |  |
| 3.18.1.1 | Skin. |  |
| 3.18.1.2 | Eardrums. |  |
| 3.18.1.3 | Oesophagus. |  |
| 3.18.1.4 | Rectum. |  |
| 3.18.2 | Measurement: minimum range from 24 to 45°C. |  |
| 3.19 | Display. |  |
| 3.19.1 | Touch screen. |  |
| 3.19.2 | Colour LCD. |  |
| 3.19.3 | Resolution: minimum 640 x 480 pixels. |  |
| 3.19.4 | Diagonal: minimum 6.5 inches. |  |
| 3.20 | Display of dynamic curves on the screen: minimum 1 to 3 curves. |  |
| 3.20.1 | Data presentation. |  |
| 3.21 | Printer as a stand-alone device: |  |
| 3.21.1 | Own power source (battery). |  |
| 3.21.2 | External power supply: |  |
| 3.21.2.1 | Power supply in the range of 12-24 V. |  |
| 3.21.2.2 | Power supply in the range of 110-240 V. |  |
| 3.21.3 | Paper width: not less than 80 mm, not more than 110 mm. |  |
| 3.21.4 | Number of channels printed simultaneously: minimum 3 channels. |  |
| 3.21.4 | **The Contracting Authority allows for a printer embedded in the device.** |  |
| Power supply | | |
| 3.22 | Own power supply (battery/batteries). |  |
| 3.22.1 | Lithium-ion battery or equivalent, without memory effect. |  |
| 3.22.2 | Battery charge status available from the device. |  |
| 3.22.3 | Operating time from own power supply: |  |
| 3.22.3 | Minimum 240 minutes of ECG monitoring. |  |
| 3.22.3 | Minimum 100 discharges with 200 J energy. |  |
| 3.23 | External power supply: |  |
| 3.23.1 | Power supply in the range of 12-24 V. |  |
| 3.23.1.1 | Power supply integrated with the cardiac monitor holder. **SCORED PARAMETER** |  |
| 3.23.2 | Power supply in the range of 110-240 V. |  |
| Reusable accessories (consumables) | | |
| 3.24 | Battery – 3 pcs. |  |
| 3.25 | etCO2 analyser – 3 pcs. |  |
| 3.26 | Basic ECG cable (main with limb leads) – 3 pcs. |  |
| 3.27 | Additional ECG cable connected to the basic cable (precordial leads) – 3 pcs. |  |
| 3.28 | Masimo finger clip SpO2 sensor for adults – 3 pcs. |  |
| 3.29 | Masimo SpO2 finger clip sensor for children – 3 pcs. |  |
| 3.30 | Extension cable for Masimo reusable SpO2/SpCO/SpMet sensors  and disposable sensors – 3 pcs. |  |
| 3.31 | Set of cuffs for NIBP for adults and children – 3 sets (full set available). |  |
| 3.32 | NIBP cable – 3 pcs. |  |
| 3.33 | Edwards NIBP cable for Truwave transducer – 3 pcs. |  |
| 3.34 | Surface/skin temperature sensor for adults (no extension required) – 3 pcs. |  |
| 3.35 | Deep temperature sensor for adults (no extension required) – 3 pcs.  - 3 pcs. |  |
| 3.36 | Extension cable for disposable temperature sensor – 3 pcs. |  |
| 3.37 | 12 V power cable with universal cigarette lighter plug – 3 pcs. |  |
| 3.38 | Mains power supply with 230 V power cord – 1 pc. |  |
| 3.39 | Carrying bag for device and accessories – 1 pc. |  |
| 3.40 | Battery charger and maintenance device (minimum 2 compartments) – 1 pc. |  |
| 3.41 | Universal wall mount with charging function from point 3.23.1.1 – 1 pc. **(if applicable)** |  |
| 3.42 | Other components necessary for the operation of the device not listed above. |  |
| 3.43 | Printer accessories in accordance with point 3.21 (if applicable): |  |
| 3.43.1 | Battery – 1 pc. |  |
| 3.43.2 | 12 V power cord with universal cigarette lighter plug – 1 pc. |  |
| 3.43.3 | Mains power supply with 230 V power cord – 1 pc. |  |
| 3.43.4 | Bag with shoulder strap – 1 pc. |  |
| Disposable accessories | | |
| 3.44 | Defibrillation electrodes for adults – 20 pcs. |  |
| 3.45 | Defibrillation electrodes for children – 10 pcs. |  |
| 3.46 | ECG electrodes for adults – minimum 50 pcs. |  |
| 3.47 | ECG electrodes for children – minimum 50 pcs. |  |
| 3.48 | EtCO2 sensor for intubated adults/children – 25 pcs. |  |
| 3.49 | etCO2 sensor for non-intubated adults/children – 25 pcs. |  |
| 3.50 | Masimo SpO2/SpCO/SpMet sensor for adults, self-adhesive – 10 pcs. |  |
| 3.51 | Masimo SpO2/SpCO/SpMet sensor for children, self-adhesive – 10 pcs. |  |
| 3.52 | IBP pressure transducer (Truwave transducer for Edwards-type tubing) – 5 pcs. |  |
| 3.53 | Surface/skin temperature sensor for adults/children – 10 pcs. |  |
| 3.54 | Deep oesophageal-rectal temperature sensor for adults/children – 10 pcs. |  |
| 3.55 | Ear temperature sensor for adults – 10 pcs. |  |
| 3.56 | Ear temperature sensor for children – 10 pcs. |  |
| 3.57 | Printer accessories: |  |
| 3.57.1 | Printer paper – 10 rolls |  |
| Service | | |
| 3.58 | Manufacturer-authorised warranty service in Poland |  |
| 3.59 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, user manual and service manual |  |
| 3.59.1 | Free inspections |  |
| 3.59.2 | Inspections including travel or transport of the device to the service centre, labour and spare parts, consumables |  |
| 3.60 | Warranty period: not shorter than until 31 August 2026. |  |
| 3.61 | Post-warranty service (inspections and repair of faults) in Poland |  |
| Documents (delivery to the Contracting Authority) | | |
| 3.62 | Instructions for use for the medical device in Polish. |  |
| 3.63 | Declaration of conformity (statement by the manufacturer or its authorised representative, stating on its sole responsibility that the product complies with the essential requirements). |  |
| 3.64 | Certificate of conformity (issued by a notified body for the purpose of affixing the CE marking). |  |
| 3.65 | Technical passport for each device separately. |  |
| 3.66 | A warranty card is included with each device separately, containing in particular: |  |
| 3.66.1 | Warranty terms and conditions and procedures for reporting faults. |  |
| 3.67 | List of authorised service centres providing warranty services (company name, address, telephone number, email address, contact person). |  |
| Training | | |
| 3.68 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |

**4. Detailed description of the syringe infusion pump:**

The infusion pump must be capable of being attached to an intensive care station (ICU) and a bridge that can be attached to stretchers.

Number of devices to be purchased: 13 (thirteen)

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| **Syringe infusion pump** | | |
| Item | Description of the object of the procurement order | Compliant Yes/No |
| 4.1 | An electronically controlled device used for the controlled administration of drugs, intermittent or continuous |  |
| 4.2 | Intended for use in all age groups |  |
| 4.3 | A portable device, suitable for transport with the patient |  |
| 4.3.1 | A handle for securing and carrying (detachable) |  |
| 4.4 | Degree of protection against external factors: minimum IP 22 |  |
| 4.5 | Device communication with the user in Polish |  |
| 4.6 | Automatic test of device functionality after switching on |  |
| 4.7 | Operating conditions: |  |
| 4.7.1 | Temperature: minimum range from +10 °C to +40 °C |  |
| 4.7.2 | Relative humidity, non-condensing: minimum range from 30 to 90% |  |
| 4.7.3 | Altitude: minimum range from sea level to 2500 m |  |
| 4.8 | The device should have a minimum defibrillation resistance. |  |
| 4.9 | Device weight with battery or battery pack (all battery slots filled), carrying handle – maximum: 2.5 kg. |  |
| 4.10 | Dimensions not exceeding: |  |
| 4.10.1 | Length with arm extended to maximum 350 mm. |  |
| 4.10.2 | Height 100 mm. |  |
| 4.10.3 | Width 117 mm. |  |
| 4.11 | Compatible with syringes from various manufacturers with a volume of minimum 5 to 50 ml. |  |
| 4.12 | Automatic syringe volume recognition. |  |
| 4.13 | Dosing accuracy +/- 2%. |  |
| 4.14 | Manual and automatic bolus. |  |
| 4.15 | Infusion speed/volume settings adjustable with an accuracy of 0.01 ml/h. |  |
| 4.16 | Functions: |  |
| 4.16.1 | Calculation of flow rate after entering concentration, volume and/or patient weight data. |  |
| 4.16.2 | Determination of the administered volume limit. |  |
| 4.16.3 | Determination of the time limit for administration. |  |
| 4.16.4 | Administration of a bolus with measurement of its volume. |  |
| 4.16.5 | Storing at least the last 100 parameter settings in memory. |  |
| 4.16.6 | Built-in drug library with maximum doses (no more than 50 drugs). The Contracting Authority will provide the data after selecting the Contractor. |  |
| 4.16.7 | Combining pumps into modules without the use of a docking station. |  |
| 4.16.8 | Possibility of simultaneously transferring up to 3 connected pumps. |  |
| 4.17 | Alarms: |  |
| 4.17.1 | Light and sound, in particular: |  |
| 4.17.1.1 | No mains power. |  |
| 4.17.1.2 | Battery nearly discharged, discharged. |  |
| 4.17.1.3 | Syringe nearly empty, empty. |  |
| 4.17.1.4 | Infusion nearing completion, infusion complete. |  |
| 4.17.1.5 | Pressure increase, rapid decrease. |  |
| 4.17.1.6 | Occlusion. |  |
| 4.17.1.7 | Incorrectly attached syringe. |  |
| 4.17.2 | Alarm volume: minimum 3 levels. |  |
| 4.18 | Display: |  |
| 4.18.1 | Large, easy-to-read display. |  |
| 4.18.2 | Battery status display. |  |
| 4.19 | Touch panel. |  |
| 4.20 | Power supply: |  |
| 4.20.1 | Own power supply (battery or rechargeable battery). |  |
| 4.20.1.1 | Lithium-ion rechargeable battery. |  |
| 4.20.1.2 | Operating time from own power supply: minimum 20 hours at a speed of 5 ml/hour. |  |
| 4.20.1.3 | Battery charging time to full charge: maximum 6 hours. |  |
| 4.20.2 | External power supply: |  |
| 4.20.2.1 | Power supply in the range of 12-24 V. |  |
| 4.20.2.2 | Power supply in the range of 110-240 V. |  |
| Service | | |
| 4.29 | Manufacturer-authorised warranty service in Poland. |  |
| 4.29.1 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, the user manual and the service manual. |  |
| 4.29.2 | Free of charge – including travel or delivery of the device to the service centre, labour and spare parts, consumables. |  |
| 4.30 | Post-warranty service (inspections and fault repair) in Poland. |  |
| 4.31 | Warranty period: not shorter than until 31 August 2026. |  |
| Documents (to be delivered to the Contracting Authority) | | |
| 4.32 | Instructions for use for the medical device in Polish. |  |
| 4.33 | Declaration of conformity (statement by the manufacturer or its authorised representative, stating on its sole responsibility that the product complies with the essential requirements). |  |
| 4.34 | Certificate of conformity (issued by a notified body for the purpose of affixing the CE marking). |  |
| 4.35 | Technical passport. |  |
| 4.36 | A warranty card attached to each device separately, containing in particular: |  |
| 4.36.1 | Warranty terms and conditions, including procedures for reporting faults. |  |
| 4.36.2 | Warranty covering the device and accessories. |  |
| 4.37 | List of authorised service centres providing warranty services (company name, address, telephone number, email address, contact person). |  |
| Training | | |
| 4.38 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |

**5. Detailed description of the transport ventilator.**

The ventilator must be capable of being attached to an intensive care station (ICU) and to a bridge attached to a stretcher.

Number of devices to be purchased: 7 (seven)

|  |  |  |
| --- | --- | --- |
| **Transport ventilator** | | |
| Item | Description of the object of the procurement order | Complies  Yes/No |
| 5.1 | A respirator for the treatment of patients with respiratory failure of various origins. |  |
| 5.1.1 | Intended for use in adults and children weighing more than 5 kg. |  |
| 5.2 | A ventilator intended for transport, including air transport. |  |
| 5.3 | A portable device, suitable for transport with the patient: |  |
| 5.4 | A built-in handle for carrying. |  |
| 5.5 | Includes handles for attachment to a stretcher. |  |
| 5.6 | Device communication with the user in Polish. |  |
| 5.7 | A text guide in case of a patient alarm. |  |
| 5.8 | Device functionality test: |  |
| 5.8.1 | Automatic daily. |  |
| 5.8.2 | Manual. |  |
| 5.9 | Operating conditions: |  |
| 5.9.1 | Temperature: minimum range from -10 °C to +50 °C. |  |
| 5.9.2 | Relative humidity, non-condensing: minimum range from 15 to 90%. |  |
| 5.9.3 | Altitude: minimum range from sea level to 2,500 m (non-hermetically sealed rooms). |  |
| 5.10 | Maximum respirator dimensions: width 35 cm x height 35 cm x depth 30 cm. |  |
| 5.11 | Device weight with battery or battery pack (all battery slots filled), built-in carrying handle – maximum 7 kg. |  |
| 5.12 | Operating modes, in particular: |  |
| 5.12.1 | CMV controlled ventilation or equivalent. |  |
| 5.12.2 | PCV ventilation or equivalent |  |
| 5.12.3 | Non-invasive ventilation |  |
| 5.12.4 | CPAP mode. |  |
| 5.12.5 | Adaptive ventilation mode in a closed breathing loop, according to Mead’s model for patients with active and passive breathing. |  |
| 5.12.6 | SIMV mode |  |
| 5.12.7 | Manual breathing. |  |
| 5.12.8 | Pressure support. |  |
| 5.13 | Respiration rate: minimum range 1-80/min. |  |
| 5.14 | Tidal volume: minimum range 50-2000 ml. |  |
| 5.15 | PEEP/CPAP: minimum range 0-30 cmH2O. |  |
| 5.16 | Adjustable inspiratory to expiratory ratio. |  |
| 5.17 | Oxygen concentration in the breathing mixture: 21-100%. |  |
| 5.18 | Inspiration time: minimum range 0.1-12.0 seconds. |  |
| 5.19 | Flow triggering: minimum range 0.1-20 l/min. |  |
| 5.20 | Inspiratory pressure: minimum range 5-60 cmH2O. |  |
| 5.21 | Plateau pressure measurement (direct or in graphical form for self-reading). |  |
| 5.22 | Monitoring and imaging of ventilation parameters, in particular: |  |
| 5.22.1 | Pressure: minimum, peak, average, PEEP/CPAP. |  |
| 5.22.2 | Total volume: inspiratory, expiratory, single breath. |  |
| 5.22.3 | Minute volume: inspiratory and expiratory. |  |
| 5.22.4 | Total respiratory rate. |  |
| 5.22.5 | Inspiration-expiration ratio. |  |
| 5.23 | Adjustable apnoea time. |  |
| 5.24 | Protection against accidental parameter changes. |  |
| 5.25 | Type of pressure drive used: compressor or turbine. |  |
| 5.26 | Alarms, as minimum: |  |
| 5.26.1 | Minute volume (high, low). |  |
| 5.26.2 | Tidal volume (low, high). |  |
| 5.26.3 | Respiratory rate (low, high). |  |
| 5.26.4 | Airway pressure (low, high). |  |
| 5.26.5 | Apnoea. |  |
| 5.26.6 | Patient disconnections. |  |
| 5.26.7 | Power failure. |  |
| 5.26.8 | Low battery charge level. |  |
| 5.26.9 | No oxygen supply. |  |
| 5.26.10 | Alarm volume: minimum 60 dB(A) at a distance of 1 metre. |  |
| 5.27 | Screen. |  |
| 5.27.1 | Screen diagonal not less than 8.4’. |  |
| 5.27.2 | Screen with variable contrast or variable brightness. |  |
| Power | | |
| 5.28 | Own power supply (battery/batteries). |  |
| 5.28.1 | Operating time from own power supply: minimum 8 hours. |  |
| 5.29 | External power supply: |  |
| 5.29.1 | Power supply in the range of 12-24 V. |  |
| 5.29.2 | Power supply in the range of 110-240 V. |  |
| Equipment | | |
| 5.30 | Carrying handle – 1 pc. |  |
| 5.31 | A 12V power cord with universal cigarette lighter plug – 1 pc. |  |
| 5.32 | Mains power supply with 230 V power cord – 1 pc. |  |
| 5.33 | An oxygen pressure hose with AGA connector (angled connector on the ventilator) 3 m long – 1 pc. |  |
| 5.34 | An oxygen pressure hose with AGA connector (angle connector on the ventilator) 1 m long – 1 pc. |  |
| 5.35 | A respiratory system for adults with a breathing valve – 10 sets |  |
| 5.36 | Test lung – 1 pc. |  |
| 5.37 | Other components necessary for the operation of the device not listed above. |  |
| Service | | |
| 5.38 | Authorised warranty service provided by the manufacturer in Poland. |  |
| 5.39 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, the user manual and the service manual: |  |
| 5.39.1 | Free of charge inspections. |  |
| 5.39.2 | Inspections including travel or transport of the device to the service centre, labour and spare parts, consumables. |  |
| 5.40 | Warranty period: not shorter than until 31 August 2026. |  |
| 5.41 | Post-warranty service (inspections and repair of faults) in Poland. |  |
| Documents (delivery to the Contracting Authority) | | |
| 5.42 | Instructions for use of the medical device in Polish. |  |
| 5.43 | Declaration of conformity (statement by the manufacturer or its authorised representative, stating on its sole responsibility that the product complies with the essential requirements). |  |
| 5.44 | Certificate of conformity (issued by a notified body for the purpose of affixing the CE marking). |  |
| 5.45 | A technical passport for each device separately. |  |
| 5.46 | A warranty card for each device separately, containing  in particular: |  |
| 5.46.1 | Warranty terms and conditions, including procedures for reporting faults. |  |
| 5.47 | List of authorised service centres providing warranty services (company name, address, telephone number, email address, contact person). |  |
| Training | | |
| 5.4 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |

**6. Detailed description of the electric suction pump:**

The electric suction pump must be capable of being attached to an intensive care station (PTU) and stored in a non-intensive care cabinet.

Number of devices to be purchased: 7 (seven)

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| --- | --- | --- |
| **Electric transport suction pump** | | |
| Item | Description of the object of the procurement order | Compliant Yes/No |
| 6.1 | A suction device for suctioning blood, secretions and food from the mouth, nasopharynx and bronchi of patients during transport. |  |
| 6.2 | Intended for use in adults and children. |  |
| 6.3 | Degree of protection against external factors: minimum IP 33. |  |
| 6.4 | Operating conditions: |  |
| 6.4.1 | Temperature: minimum range from 0 °C to +40 °C. |  |
| 6.4.2 | Relative humidity, non-condensing: minimum range from 15 to 90%. |  |
| 6.5 | The electric mouse has: |  |
| 6.5.1 | Adjustable vacuum pressure. |  |
| 6.5.2 | Negative pressure range: minimum 50 to 500 mmHg (converted to bar: minimum 0.07 to 0.66). |  |
| 6.5.3 | Actual vacuum indicator. |  |
| 6.5.4 | Battery/battery level indicator. |  |
| 6.6 | Equipped with a single-use container. |  |
| 6.6 | Container capacity: not less than 300 ml and not more than 500 ml. |  |
| 6.6.1 | Can be replaced with a single-use container with a larger capacity: no more than 800 ml. |  |
| 6.7 | Power supply: |  |
| 6.7.1 | Own power supply (battery). |  |
| 6.7.1.1 | Operating time from own power supply: minimum 45 minutes with free flow. |  |
| 6.7.2 | External power supply: |  |
| 6.7.2.1 | Power supply in the range of 12-24 V. |  |
| 6.7.2.2 | Power supply in the range of 110-240 V. |  |
| 6.8 | Device weight no more than 1.5 kg. |  |
| Equipment: | | |
| 6.9 | A 12V power cord with universal cigarette lighter plug – 1 pc. |  |
| 6.10 | Mains power supply with 230 V power cord – 1 pc. |  |
| 6.11 | A container with a capacity of 300-500 ml with patient tube, disposable – 10 sets. |  |
| 6.12 | Transport bag – 1 pc. |  |
| 6.13 | All cables and other components necessary for the operation of the device, not listed above. |  |
| Service | | |
| 6.14 | Authorised warranty service provided by the manufacturer in Poland. |  |
| 6.15 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, the user manual and the service manual. |  |
| 6.15.1 | Free of charge inspections. |  |
| 6.15.2 | Inspections including travel or transport of the device to the service centre, labour and spare parts, consumables. |  |
| 6.16 | Warranty period: not shorter than until 31 August 2026. |  |
| 6.17 | Post-warranty service (inspections and repair of faults) in Poland. |  |
| Documents (to be delivered to the Contracting Authority) | | |
| 6.18 | Instructions for use for the medical device in Polish. |  |
| 6.19 | Declaration of conformity (statement by the manufacturer or its authorised representative, stating on its sole responsibility that the product complies with the essential requirements). |  |
| 6.20 | Certificate of conformity (issued by a notified body for the purpose of affixing the CE marking). |  |
| 6.21 | Technical passport for each device separately. |  |
| 6.22 | Warranty card for each device separately, including  in particular: |  |
| 6.22.1 | Warranty terms and conditions together with procedures for reporting faults. |  |
| 6.23 | List of authorised service centres providing warranty services (company name, address, telephone number, email address, contact person). |  |
| Training | | |
| 6.24 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |

**7. Detailed description of the oxygen concentrator:**

The oxygen concentrator must be capable of being attached to an intensive care station (ICU)   
in order to supplement oxygen supplies in the event of insufficient oxygen supplies in oxygen cylinders.

Number of devices to be purchased: 3 (three)

|  |  |  |
| --- | --- | --- |
| **Oxygen concentrator, cylindrical** | | |
| Item | Description of the object of the procurement order | Complies Yes/No |
| 7.1 | Maximum dimensions: |  |
| 7.1.1 | Length – 690 mm. |  |
| 7.1.2 | Diameter – 120 mm. |  |
| 7.2 | Device weight with battery: maximum 6 kg. |  |
| 7.3 | Operating conditions: |  |
| 7.3.1 | Temperature: minimum range from 0 °C to +40 °C. |  |
| 7.3.2 | Humidity, non-condensing: minimum range from 10 to 90%. |  |
| 7.4 | Ambient pressure compensation range in a non-hermetic enclosure corresponding to operation at sea level: from (-) 381 m to 3953 m. |  |
| 7.5 | Degree of protection against external factors: minimum IP 33. |  |
| 7.6 | Flow settings: |  |
| 7.6.1 | Continuous. |  |
| 7.6.2 | Pulse. |  |
| Power supply: | | |
| 7.7 | From its own power source (battery). |  |
| 7.7.1 | Replaceable battery, no memory effect. |  |
| 7.7.2 | Operating time from own power supply: minimum 40 minutes at a continuous flow rate of 2 litres per minute. |  |
| 7.7.3 | Battery charging: |  |
| 7.7.3.1 | With 24 V DC. |  |
| 7.7.3.2 | Alternating current 100-240 V, 50-60 Hz. |  |
| 7.8 | Audible alarms minimum: |  |
| 7.8.1 | Low oxygen concentration. |  |
| 7.8.2 | Low battery charge level. |  |
| 7.8.3 | Failure. |  |
| Equipment: | | |
| 7.9. | Battery – 2 pcs. |  |
| 7.10 | Spare filters (HEPA filter and air inlet filter) – 1 set |  |
| 7.11 | 24 V power cord with universal cigarette lighter plug – 1 pc. |  |
| 7.12 | Mains power supply with 230 V power cord – 1 pc. |  |
| Service | | |
| 7.13 | Manufacturer-authorised warranty service in Poland. |  |
| 7.14 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, the user manual and the service manual. |  |
| 7.14.1 | Free of charge inspections. |  |
| 7.14.2 | Inspections including travel or transport of the device to the service centre, labour and spare parts, consumables. |  |
| 7.13 | Warranty period: not shorter than until 31 August 2026. |  |
| 7.14 | Post-warranty service (inspections and repair of defects) in Poland. |  |
| Documents (delivery to the Contracting Authority) | | |
| 7.15 | Instructions for use for the medical device in Polish. |  |
| 7.16 | Declaration of conformity (statement by the manufacturer or its authorised representative, stating on its sole responsibility that the product complies with the essential requirements). |  |
| 7.17 | Certificate of conformity (issued by a notified body for the purpose of affixing the CE marking). |  |
| 7.18 | A technical passport for each device separately. |  |
| 7.19 | A warranty card for each device separately, including in particular: |  |
| 7.19.1 | Warranty terms and conditions together with procedures for reporting faults. |  |
| j7.20 | List of authorised service centres providing warranty services (company name, address, telephone number, email address, contact person). |  |
| Training | | |
| 7.21 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |

**8. Detailed description** **of the device for loading and unloading patients on stretchers .**

The device for loading and unloading patients on stretchers must allow for the stretchers described in points 1.1 and 2.1 to be secured to it and for the stretchers with patients to be transported at least from the intensive care station (PTU) or non-intensive care bed to the aircraft door for placement in an “ambulift” vehicle.

Number of devices to be purchased: 1 (one).

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| --- | --- | --- |
| **Patient loading and unloading device** | | |
| Item | Object of the procurement order | Compliant Yes/No |
| 8.1 | A device ensuring that the stretchers described in points 1.1 and 2.1 can be secured to it. |  |
| 8.2 | A device allowing the stretchers with the patient to be transported at least from the intensive care station (PTU) or non-intensive care bed to the aircraft door without colliding with the existing aircraft infrastructure (passenger seats, toilets, partition walls, etc.). |  |
| 8.3 | A device made of lightweight and durable corrosion-resistant material, protected against minor damage, resistant to disinfectants. |  |
| 8.4 | The device shall have a load capacity adapted to the load capacity of the stretchers described in points 1.1 and 1.2. |  |
| 8.5 | The device must be capable of being secured/stored in the aircraft during flight (the Contracting Authority allows storage in the luggage compartment, provided that the device can be used shortly after the aircraft has stopped and parked). |  |
| 8.6 | A device that allows the product to be folded without tools for easier storage during flight. **SCORED PARAMETER** |  |
| Service | | |
| 8.7 | Manufacturer-authorised warranty service in Poland. |  |
| 8.8 | Warranty inspections in accordance with the manufacturer’s requirements and recommendations, the user manual and the service manual. |  |
| 8.8.1 | Free of charge inspections. |  |
| 8.8.2 | Inspections including travel or transport of the device to the service centre, labour and spare parts, consumables. |  |
| 8.9 | Warranty period: not shorter than until 31 August 2026. |  |
| 8.10 | Post-warranty service (inspections and repair of defects) in Poland. |  |
| Documents (delivery to the Contracting Authority) | | |
| 8.11 | Instructions for use for the medical device in Polish. |  |
| 8.12 | Declaration of conformity (statement by the manufacturer or its authorised representative, stating on its sole responsibility that the product complies with the essential requirements). |  |
| 8.13 | Certificate of conformity (issued by a notified body for the purpose of affixing the CE marking). |  |
| 8.14 | A technical passport for each device separately |  |
| 8.15 | A warranty card for each device separately, including in particular: |  |
| 8.16 | Warranty terms and conditions including procedures for reporting faults. |  |
| 8.17 | List of authorised service centres providing warranty services (company name, address, telephone number, email address, contact person). |  |
| Training | | |
| 8.18 | Training for selected representatives of the Contracting Authority (2 to 5 persons) on the use of the device on a mutually agreed date in Warsaw. |  |