Procurement conditions

Annex 5 (Proposal form)

Appendix 1

**OFFERED BODY ARMOUR (BUOYANT BODY ARMOUR)**

**TECHNICAL SPECIFICATION**

Table 1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  |  |  |  |  |
| No. | **Buoyant body armour minimal techical indicators** | | | | | | |
| *1* | *2* | | | | | | *3* |
|  | **Requirements** | | | | | | Compliance with requirements  (fields marked in yellow are to be filled in by the Supplier, indicating a specific value (if requested) or whether the proposed product complies or does not comply with a specific requirement\*) |
| *Offered Buoyant body armour name, manufacturer, model* | | | | | | | |
| ***GENERAL PROVISIONS*** | | | | | | | |
| 1.1. | Buoyant Body Armour (hereinafter referred to as the vest or BBA) – is a personal protective equipment item designed to protect vital organs from the injurious effects of firearms and fragments during combat missions. The vest is intended for members of the Lithuanian National Defence System performing specific tasks on ships, on water, and in water, both within the territory of the Republic of Lithuania and abroad. | | | | | | *Reference to the source of information* |
| 1.2. | The BBA and other component parts must be new and unused. | | | | | | *Reference to the source of information* |
| 1.3. | *Warranty periods for body armour:* | | | | | | |
| 1.3.1 | Ballistic plates – not less than 5 years from the date of signing the goods handover and acceptance certificate. | | | | | | *specify the exact warranty period (in years)* |
| 1.3.2 | Other elements (textile covers, buoyancy compensators, etc.) – not less than 24 (twenty-four) months under active operating conditions (counted from the date the goods are issued from the Buyer’s warehouse) and 5 years from the date of signing the goods handover and acceptance certificate. | | | | | | *specify the exact warranty periods in accordance with both requirements in months or years.* |
| ***TECHNICAL REQUIREMENTS*** | | | | | | | |
| 2.1. | *The body armour consists of:* | | | | | | |
| 2.1.1 | Textile covers for the front and back ballistic plates; | | | | | | *Reference to the source of information* |
| 2.1.2 | Two adjustable shoulder straps (shoulder padding optional); | | | | | | *Reference to the source of information* |
| 2.1.3 | Side waist belt of the vest for housing buoyancy compensators; | | | | | | *Reference to the source of information* |
| 2.1.4 | Two plates curved in two directions for chest and back protection; | | | | | | *Reference to the source of information* |
| 2.1.5 | Two main buoyancy compensators; | | | | | | *Reference to the source of information* |
| 2.1.6 | Two emergency flotation devices; | | | | | | *Reference to the source of information* |
| 2.1.7 | Transportation and storage bag with compartments for ballistic plates and other components. | | | | | | *Reference to the source of information* |
| 2.2. | *Requirements for the functionality of the BBA:*  *Note: supplier must also fill in the required sections in* ***Table 2*** *of the technical specifications* | | | | | | |
| 2.2.1 | *The following is used to manufacture textile covers for the front and back ballistic plates of BBA:* | | | | | | |
| 2.2.1.1 | A solid-colour moss fabric (close to colour code 6003 (olive green) according to the RAL colour catalogue), which is non-flammable on the surface, shall be used for manufacturing the textile covers of the BBA front and back ballistic plates. The exact colour will be finalized during the working sample approval process. The fabric’s technical characteristics shall meet (or exceed) the technical specifications listed in Table 1 of Annex 1. | | | | | | *Reference to the source of information* |
| 2.2.2 | Textile (webbing) straps, hook-and-loop fasteners, and other accessories used in the vest production (clauses 5.1 – 5.3) shall be single-coloured and match the colour of the outer fabric. Accessory colours will be finalized during the working sample approval process. | | | | | | *Reference to the source of information* |
| 2.2.3 | fastening parts (close to the color of the top fabric, color code 6003 (olive green) according to the RAL color catalog). | | | | | | *Reference to the source of information* |
| 2.2.4 | All external elements used in the production of the BBA (outer fabric and accessories) must be **non-flammable and possess infrared (IR) reflectivity**. The spectral reflectance factor of the fabric in the near-infrared radiation spectrum (800–1200 nm) shall range from 15% to 45%. The spectral reflectance factor of the accessories in the near-infrared radiation spectrum (800–1200 nm) shall be close to that of the outer fabric. | | | | | | *Submit technical documentation from component manufacturers or reports from accredited laboratories.* |
| 2.3. | *Requirements for the functionality of the BBA:* | | | | | | |
| 2.3.1 | To achieve functional and ergonomic compatibility with other equipment and clothing elements used by the soldier, and to reduce the risk of catching on obstacles, the BBA shall be a low-profile **plate carrier**; | | | | | | *Reference to the source of information* |
| 2.3.2 | The vest shall have a carrying/evacuation handle on the upper rear part (intended for evacuating the soldier); | | | | | | *Reference to the source of information* |
| 2.3.3 | The BBA shall have a secure quick-release and fastening system. The vest must not come undone by itself during task execution; | | | | | | *Reference to the source of information* |
| 2.3.4 | Height adjustment and release of the vest shall be located in the shoulder area; | | | | | | *Reference to the source of information* |
| 2.3.5 | The vest must have width adjustment elements; | | | | | | *Reference to the source of information* |
| 2.3.6 | The front, back, and sides of the vest must have a pouch attachment ladder system (PALS) webbing stripes or an equivalent system with at least 6 rows on the front and back; | | | | | | *Nuoroda į informacijos šaltinį ir*  *Nurodyti eilių skaičių* |
| 2.3.7 | In the front and upper back of the vest, soft (loop) parts of hook-and-loop fasteners shall be sewn for patches; | | | | | | *Reference to the source of information* |
| 2.3.8 | The waist belt must have the capability to accommodate and secure buoyancy-supporting equipment; | | | | | | *Reference to the source of information* |
| 2.3.9 | The textile elements of the body armour must provide the user with even weight distribution and modularity; | | | | | | *Reference to the source of information* |
| 2.3.10 | The shape and positioning of the buoyancy-supporting equipment during operation in water must ensure that the soldier’s head remains above the water; | | | | | | *Reference to the source of information* |
| 2.3.11 | The shape and positioning of the buoyancy-supporting equipment during operation in water must not hinder the ability to use a weapon. | | | | | | *Reference to the source of information* |
| 2.4. | *Requirements for ballistic protection:* | | | | | | |
| 2.4.1 | To ensure soldiers’ safety from potentially threatening factors, the chest and back ballistic plates must provide at least Level III protection according to the NIJ 0101.06 standard, or Level RF1 according to the NIJ 0101.07 standard, or an equivalent standard. | | | | | | *Ballistic test reports from an accredited laboratory with a conclusion or a certificate issued by a certification body confirming compliance with the required level of ballistic protection.* |
| 2.4.2 | Backface Signature (BFS) (backface deformation (BFD)) ≤ 44 mm according to NIJ 0101.06 or NIJ 0101.07 standards, or an equivalent standard. | | | | | | *Ballistic test reports from an accredited laboratory with a conclusion or a certificate issued by a certification body confirming compliance with the required level of ballistic protection.* |
| 2.4.3 | The protective plates of the BBA must cover vital internal organs. | | | | | | *YES / NO* |
| 2.4.4 | Requirements for the size and weight of the BBA protective plates:   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | **Dimension (± 5mm)** | **Area (±5%)** | **Maximum thickness** | **Maximum weight** | | **Front, back** | 250x300 mm | 675 cm² | 22 mm | 1200 g |   Ballistic plates of SAPI/ESAPI type with double curvature. | | | | | | *Specify the exact values for each piece of data:*  *Dimension-*  *Area-*  *Thickness-*  *Weight-* |
| 2.4.5 | All protective plates must be removable and insertable into the vest. Front and back ballistic plate mounts shall be provided to ensure stable fixation of the plates during active use. | | | | | | *Reference to the source of information* |
| 2.5 | *Requirements for compensators and emergency buoyancy-supporting equipment:* | | | | | | |
| 2.5.1 | Main compensators, reusable, integrated into the textile covers of the front and back ballistic plates, with an inflation tube; | | | | | | *Reference to the source of information* |
| 2.5.2 | Minimum lifting capacity of the main compensators for M-XL vests: 10 lbs / 4.5 kg; | | | | | | *Specify the exact value* |
| 2.5.3 | Emergency buoyancy-supporting devices (containers), reusable with a double inflation system; | | | | | | *Reference to the source of information* |
| 2.5.4 | Emergency buoyancy devices must have two CO2 cylinders with activation/release handles and two inflation tubes for each compartment for secondary inflation; | | | | | | *Reference to the source of information* |
| 2.5.5 | The emergency buoyancy support device ensures the following buoyancy characteristics:  2.5.5.1. positive buoyancy on the water surface of at least 33 kg;  2.5.5.2. positive buoyancy at a depth of 4.5 m of at least 25 kg;  2.5.5.3. positive buoyancy at a depth of 10 m (in seawater) of at least 20 kg. | | | | | | *Reference to the source of information* |
| 2.6. | *Body armour sizes:* | | | | | | |
| Body armour shall be manufactured in the sizes specified in the table (dimensions in centimetres):   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | SIZES | | S | M | L | XL | | Waist circumference, cm | | 74-88 | 82-96 | 90-104 | 98-112 | | Front height | Standard (R) | ≤ 42 | | | | | Extended (L) | > 43 | | | |   *Note. If necessary, non-standard sizes not specified in the table may be requested, not exceeding 2% of the ordered quantity.* | | | | | | | *Reference to the source of information* |
| *Body armour weight* | | | | | | | |
| 2.7. | The weight of the body armour and its components (excluding the transport and storage bag) for size M(R) must not exceed **10** kg. | | | | | | *Specify the exact weight.* |

\*Notes:

1) Important: When specifying the specific value of the goods or their compliance with it, the Supplier must indicate to the contracting authority in which document submitted by the Supplier in the CVP IS the data confirming/proving the requirement is contained (specify the specific folder/file in which the document is submitted, the name of the document and the page);

2) The words "or equivalent" shall be written next to all specified specific materials and/or specific product names. A supplier offering a product with equivalent characteristics must prove by reliable means that the product offered is equivalent and fully complies with the requirements set out in the technical specifications.

Table 2

**TECHNICAL SPECIFICATIONS OF THE BODY ARMOR UPPER FABRIC**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Parameter name** | **Dimension** | **Indicator value** | **Test method reference** | **Compliance with requirements**  (to be completed by the Supplier, indicating the specific value or whether the proposed product complies or does not comply with a specific requirement\*) |
| 1. | Fibre composition \* | % | 100% PA 6.6 | Specify | *Submit an accredited laboratory test report* |
| 2. | Maximum  – warp direction  – weft direction | N | ≥ 4200  ≥ 3000 | LST EN ISO 13934-1 (ISO 13934-1) or equivalent | *Submit an accredited laboratory test report* |
| 3. | Tear strength  – warp direction  – weft direction | N | ≥ 200  ≥ 200 | LST EN ISO 13937-2 (ISO 13937-2) or equivalent | *Submit an accredited laboratory test report* |
| 4. | Surface wetting resistance | class | ≥ 4 | LST EN ISO 4920 (ISO 4920) or equivalent | *Submit an accredited laboratory test report* |
| 5. | Ignition rate | s | ≥ 7 | LST EN ISO 6940 (ISO 6940) or equivalent (surface flammability) | *Submit an accredited laboratory test report* |
| 6. | Abrasion resistance under a nominal pressure of 12 kPa | cycles | ≥ 250 000 | LST EN ISO 12947-2 (ISO 12947-2) or equivalent | *Submit an accredited laboratory test report* |

*\* \* The fibre composition may be determined by any authorized method..*