LOT 4 Personnel protection equipment

| *ANNEX II + III :* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER  Contract title : Procurement equipments (Supply) p 1 /…  Publication reference : RORS 283/8/4 eMS  Columns 1-2 should be completed by the Contracting Authority  Columns 3-4 should be completed by the tenderer  Column 5 is reserved for the evaluation committee  Annex III - the Contractor's technical offer  The tenderers are requested to complete the template on the next pages:  Column 2 is completed by the Contracting Authority shows the required specifications (not to be modified by the tenderer),  Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words “compliant” or “yes” are not sufficient)  Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation  The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.  The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.  Any mentions regarding a trade mark, brand, model or standard is only for a proper and issyier identification of product requirements, and should be understand as followed by phrase “or equivalent”. | | | | | | |
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| **Item Number** | **Specifications Required** | **Specifications Offered** | **Notes, remarks,  ref to documentation** | **Evaluation Committee’s notes** |
|  | **Multi-protection suit (***PROTECTIVE SUIT FOR FIREFIGHTERS* - PSF) **– 100 pcs (50 jacket and 50 pants)**   1. **GENERAL REMARKS**   The equipment must meet the minimum requirements of the following standards:  EN ISO 14116: 2015 - Protection against heat and flame, (or similar)  EN ISO 20471: 2013 - High visibility signage for professional use, (or similar)  EN 1149 - Protective clothing for electric springs , (or similar)  EN 343: 2003 Rain protection , (or similar)  **The protective suit** **for firefighters** (PSF) must be made and used according to the requirements for **level 2** of **SR EN 469:2006 (EN 469:2005) "*Protective clothing for firefighters. Performance requirements for fire protection clothing*"**  The suit is made of materials with special properties, being made up of jacket and trousers, made in the range of sizes 44-62, sizes I, II, III, and has blue-navy (ultramarine) and/or beige color, with retro-reflective and fluorescent band.  **The suits allow for automatic washing at a temperature of 60°C, spinning by centrifugation at MIN 500 rpm. and hot air centrifugation drying.**  **II. MATERIALS USED AND TECHNICAL REQUIREMENTS**  2.1. **Outer layer** (basic material for jacket and trousers): aramid (or similar), antistatic fabric.  The basic fabric of the suit is made of minimum 60% of fibers with high performance at fire (such as viscose, Nomex, Lenzing, PBI, or similar), **aramid fibers** and of **antistatic fibers in percentage of 1-3%.** The mass of the fabric must be 200 (±10%) g/m2. The fabric must provide protection and durability when worn, increased resistance to light, rubbing, under intense operating conditions, accessible maintenance/cleaning methods.  2.2. **Intermediate layer**: multilayer material that provides protection against radiant heat and water, made from a combination of materials, as follows: **fireproof impervious breathable membrane**, made of polymers (*PTFE-FR type*), which provides water protection and **textile support** with aramid fiber (or similar), with high resistance to radiant heat, on which the impervious breathable membrane is laminated on one side, with a mass of max. 100 g/m2.  2.3. **Inner layer (lining)**: textile layer, with thermal protection, made of a layer/material made of *meta*-aramid yarn and fire-resistant viscose, doubled with textile material (for the thermal barrier) from aramid and modacrylic fibers. The total mass must be below 270 g/m2.  2.4. **Patch material**: made of 100% para-aramid fibers (kevlar type), covered with a silicone/carbon layer with a density of 300-400 g/m2.  2.5. **Retro-reflective and fluorescent band**. The band is made of 100% aramid material. The band is composed of a central silver-white area, of at least 2 cm, with retro-reflective properties and two yellow fluorescent side zones. The band must comply with the requirements of SR EN 20471:2013 (or similar) and those set out in Annex B of EN 496:2006. We do not accept solutions of band separated on colors and individually sewn on suit.  To demonstrate the properties, technical test reports and/or certificates of compliance with the requirements of EN 20471:2013 (or similar), correlated with the visibility requirements set out in Annex B of EN 469:2006 will be submitted.  2.6. **Fireproof adhesive tape**, used for waterproofing the seams of multilayer (intermediate) material, compatible with the materials to be fastened.  2.7. Large teeth flame retardant **zipper** for high mechanical strength used for closing - opening the jacket chest with quick emergency opening.  2.8. **Elastic** with the width of min. 3.5 cm - for trouser straps.  2.9. Flame retardant **velcro band** (loop - hook), with a width of 2-3 cm for pockets/accessories (collar, braces at the end of the sleeves, fastening the ends of the outer epaulettes) and width of 3-5 cm for the front closure of the jacket and adjustments at the waist of the pants. Continuous velcro tape will be used for closing the pockets and the front of the jacket.  2.10. **Flame retardant thread** - for stitching and threading seams.  2.11. C*olor flame retardant materials/paints, resistant on the product to repeated washing* - for the inscription of the logo "POMPIERII” on the back " at the level of the shoulder blades. Screen printing directly on the material of the suit is not allowed. The inscription shall be made on a reflective material similar to that in item 2.5 attached to the suit with Velcro tape.  2.12. Patent stockinette 1: 1, 8 cm in width, made of flame retardant yarn - used at the ends of the sleeves (cuffs), fastened to the lining (on the inside). It must meet the specifications for **index 3** of flame propagation in **EN ISO 14116:2015** (or similar) - “Protective clothing. Fire protection. Materials, assemblies of materials and clothing with limited flame propagation”.  2.13. Textile **label** and cardboard label - CE marking, according to the MARKING chapter, applied to each component of the garment.  2.14. **Protective cover**, zippered, made of textile material (dark color) - according to the PACKAGING chapter.  ***Note: The quality of the materials used in making the Protective Suit for Firefighters is guaranteed by the supplier. It must ensure that all the materials introduced in the manufacturing process have the quality required by the provisions of the present technical specification and that all the materials used to make the suits do not have harmful effects on the health of the users.***  **III. PERFORMANCE LEVELS OF THE SUIT**  The finished product must meet the performance levels set out below, which constitute the **minimum quality requirements** for **level 2** of **SR EN 469:2006 (EN 469:2005) "*Protective clothing for firefighters. Performance requirements for fire protection clothing*"** as follows:   * level of protection against heat - flame and radiation: Xf2 and Xr2; * level of resistance to hydrostatic pressure: Y2; * level of resistance to water vapors: Z2   **IV. THE MAKING OF THE SUIT**  The protective suit for firefighters consists of jacket and trousers. The jacket and trousers are made as follows:  - the outer layer of aramid fabric, which provides protection against fire;  - the intermediate layer that provides protection against heat radiation and water protection;  - inner layer - lining with thermal protection.  **4.1**. **The jacket** has front, back and sleeves, and at the top has a tunic type collar, with a height of at least 10 cm. The jacket is of short type (maxim 85 cm), having retro-reflective and fluorescent bands around it, at least at the level of the chest and the endings, as well as on the sleeves (on the forearm and at the end) applied on it.  The front of the jacket consists of two symmetrical parts, and the back of a single part.  The closure-opening system of the jacket is with zipper (with emergency opening system) and waterproof zipper cover, made of basic material, fastened with velcro tape, with a width of 3-5 cm.  The inner layer at the bottom of the jacket will be protected from dirt with silicone material on a width of at least 5 cm.  The jacket will allow the inspection of the intermediate layer by means of a slot located in the area of ​​the lower hem inside the jacket. The closure of this slot will be done with velcro.  **This paragraph presents a minimal technical solution:**  The front of jacket has at least 4 pockets, all with welt pocket and flap. The upper part of the left chest has minimum 2 pockets with welt pockets and flap, with retroreflective-fluorescent strip. Above the pockets a system for gripping the radio station is made, provided with Velcro type band. At the bottom of the front, a pocket with welt pockets and flap is positioned symmetrically. The closure of the flaps from the pockets is made with velcro tape.  A bridle clamp is sewn under the flap of a lower pocket to allow specific accessories to be attached to the metal carabiner.  For a better visibility, on the front of the jacket will be applied 2 vertical retro reflective strips on the sides of the closure zipper as well as a white / silver retro reflective strip on top of the pockets while on the back will be applied 2 vertical retro-reflective strips which will frame the inscription "POMPIERII". At the base of the jacket, the horizontal retro reflective strips will be doubled  **The sleeves** are straight, made of at least two longitudinal parts, provided with a gusset (for lightness) and patch (additional reinforcement described at 2.4.) at the elbow, as well as at the end, in the form of a cuff.  The adjustment of the sleeve width at the wrist is made with a bridle made of basic material, provided with velcro tape. At the end, the sleeves are fastened to the lining, on the inside, a flame retardant knitwear with a release for the thumb, so that the cuff provides thermal protection of the palms.  **The collar** is designed to provide protection against risk factors for the back of the neck and neck, being made up at the front and the back of basic raw material that closes at the front with flap made of base material and velcro tape.  **4.2. Inscribing the jacket**  On the right chest, positioned above the visibility band, a velcro surface is provided for the name or «POMPIERII» to be attached/inscribed with flame retardant reflective materials. The height of the letters is 11.5+1.5 mm, evenly distributed.  On the back of the jacket (above the reflective-fluorescent flame retardant tape on the top), the logo «POMPIERII» is inscribed with flame retardant reflective materials. The height of the letters is min 50 mm, and the width of the logo «POMPIERII» will be framed between the sleeves armholes of the back area. The arrangement of the letters in width will be based on the distance between the sleeve armholes, so that the width of the logo will be calculated to fit between the sleeve armholes**.**  **4.3.** **The pants** are made with fly in front, which closes with a zipper or Velcro type band. At the top, the pants are provided with elastic straps, to ensure lightness of movement, adjustable with buckles and spacer on the back for length adjustment.  In order to increase ergonomics and safety in use, the two straps will be joined in the back area.  The pants are adjusted at the waist by means of two bands positioned laterally, in the waist, the adjustment being made by the textile band (basic raw material), buckles, belts or velcro band.  The trousers will be provided with hidden pockets, one on each trouser leg.  On each outer thigh, a pocket with a flap pocket is applied symmetrically. The closing of the pockets flap is made with continuous velcro tape and/or zipper.  At the knee level a patch material described at 2.4.is fixed.  The patch has another thermal lining applied over a length of at least 30 cm. The outer patch will be of the same length, being mounted in the side seams of the pants, and the lower and upper part are fastened by double stitches.  At a distance of 20-25 cm from the lower edge of the pants, the retro-reflective and fluorescence band is applied.  On the inner seam, at the end, a protection against dirt is made of silicone coating material, the hem being made of the same material with silicone coating.  All stitches on the Protective Suits for Firefighters must be uniform and uninterrupted. The seams must be evenly tensioned. The joints must not be wrinkled or have ends of uncut threads.  **V. MARKING**  The "**protective suit for firefighters**" falls under **risk category III** and is subject to the procedure for assessing the conformity, rules and conditions for applying the CE marking, corresponding to the category III PPE, in compliance with Government Decision no. 305/2017 dated 5th of May, 2017, regarding the establishment of measures implementing the Regulation (EU) 2016/425 of the European Parliament and of the Council dated 9th of March 2016 on personal protective equipment.  **Both the pants and the jacket will be marked with the number of the standard in force (at the time of the manufacture of the products), minimum with the icon specific for the firefighters and with the CE marking** followed by the identification number of the notified body of the EU (including category III-PPE).  The performance level of the suit will be written on the label as follows:  Xf2 and Xr2 – for the level of protection against heat (flame and radiation, respectively);  Y2 – for the level of resistance to the initial hydrostatic pressure;  Z2 – for the level of resistance to water vapours.  Each product (jacket and pants) will be provided with a textile label, stitched, which will indicate: the name of the manufacturing company, the name of the product, the fibrous composition, the date of manufacture, the size, the international maintenance signs, the quality control sign and warn that the jacket and the pants are only worn together. The ink used for marking must be resistant to repeated washing.  Also, the protective suit for firefighters will be accompanied by the information and use sheet, prepared by the supplier in accordance with the provisions of the standard in force.  **VI. PACKING**  **PACKING** - is made individually, taking all the measures to prevent the damaging of the suits, on which a label is applied which indicates: the name of the manufacturer; the name of the product; size indication; date of manufacture; the sign of the technical quality control body. |  |  |  |
|  | **Water and mud protection boots – 50 pairs**  **The chest boots for water and mud protection** are used in the specific activities by the personnel of the structure of the General Inspectorate for Emergency Situations. They are made by the injection process, from polymeric materials on synthetic fiber stockinette support, according to the provisions of SR EN ISO 20345 (EN ISO 20.345:2011) “Personal protective equipment. Safety shoes” (or similar).  **I. MINIMUM TECHNICAL SOLUTION FOR MANUFACTURE**  The chest boots for water and mud protection are made of antistatic polymeric materials through the injection process.  The sole and the heel will be made with a non-slip profile.  To ensure the protection of the foot to mechanical shocks and to perforation, the protective boot for water and mud will be provided on the inside with metal toe cap and anti-puncture insert in the sole, and on the outside reinforcements in the areas of the toes, ankle, heel will be made. The flexible, waterproof extension from the top (from calf to chest) is made from polymeric materials on synthetic fiber support.  The joining of the boot with the upper extension is done by overlapping joining of the two, over a width of at least 15 mm.  At the top, the chest of the boot ends with buckle arms that prevent pants from falling.  The outer surface of the boots and in section should be free of cracks, air bubbles, pores, inclusions of foreign bodies visible to the naked eye.  The fabric support of the boots must be well bonded to the outer layer, so that it does not have air holes and is not wrinkled.  No detachment is allowed on the line joining the face with the sole or the heel.    **II. The product** will be accompanied by the EC Examination certificate or EC declaration of conformity for at least the requirements of EN ISO 23044:2011 (or similar) and EN ISO 20345:2011 (or similar) for the following test**:**   * SRA or SRC (slip resistance) * S5 category     NOTE: the models presented as a technical proposal during the procurement procedures and the products delivered under the contract will be accompanied by declarations of conformity.  **III. MARKING, PACKING**  **3.1** The **marking** of the boots for water and mud protection will be made by punching, on the sole and will include the following details: name of the manufacturing company, size, date of manufacture month/year, model, standard no. - SR EN ISO 20345-2012 (EN ISO 20.345:2011) **CE** marking, category marking symbols, for ex.: "**S5 SRC**" + "KM 200J"  **3.2 Packing** - the the boots for water and mud protection are placed in a cardboard box, on which a label with the following mentions is applied: supplier's name, product name, year/month of manufacture, size, category and marking symbols: "**S5 SRC**" + "KM 200J"  Each box contains an instruction sheet for the maintenance and use of the boots, written in Romanian. |  |  |  |
|  | **Fire protection boots for firefighters 50 pcs ( 25 pairs)**   1. **GENERAL REMARKS**   **1.1.** Within the technical proposal the tenderer will present a document issued by a specialized body in the field (notified body), certifying that the manufacturer of the boots has implemented a quality assurance system, according to SR EN 9001/2008 or equivalent.  **1.2.** The **boots** are made and used according to the provisions of the harmonized European standard SR EN 15.090/2012 "**Footwear for firefighters**" (or similar), are made in 5 sizes between 40 and 44 using bootlast with thickness 10 and are black in colour.  **1.3.** The uppers are made of processed bovine leather, black, with impervious breathable and waterproof laminated fabric that provides protection against heat and water.  The upper part of the top of the boot is fitted with a sleeve (collar).  The inner membrane will prevent water / moisture from entering the boot but will allow "breathing" of the skin of the feet and the elimination of water from perspiration.  The boots will have:  - Fire resistant laces;  - Quick release with zipper protected on the outside with leather  - Rubber / polyurethane sole resistant to petroleum fuels, bases, acids, anti-slip, anti-penetration, antistatic.  - The soleplate will have a stainless steel metal insert for protection against penetration according to EN 12568/2010.  - The sole will be resistant to high temperatures above 300 0C and it will keep its flexibility at temperatures below -20 0C;  - Certified metal pump for finger protection. It will withstand an impact of at least 200 July and a pressure of at least 15 KN.  **V. MINIMUM TECHNICAL REQUIREMENTS FOR PROTECTION**  The model presented in the procurement procedure as a technical proposal, will be accompanied by the EC Examination certificate, EC declaration of conformity for at least the requirements below:  - EN 15090: 2012 **Footwear for firefighters**  **\*** F2A (Type 2)  \* heat insulated HI3  \* heat resistant outsole HRO;  \* Cold insulated CI  - EN ISO 20345/2011 (or similar) : SRC (slip resistance), S2 (water penetration / absorbtion)  **VI.** **MARKING AND PACKING**  **1. The boots fall into category III risk** and are subject to the procedure for assessing the conformity, rules and conditions for applying the CE marking, corresponding to the performance category (tests results), for example:  - t**ype of protection 2HI2, the specific icon,**  **- the number of the standard SR EN 15090/2012**  **- the performance category and the F2A SRC marking symbols (or according to the product tests results),**  **- the manufacturer's name,**  **- the model code**  **- the size**  **- the year and at least the manufacturing quarter.**  On the upper part of the top bands (on the outside), the icon showing the ensured protection is applied. On the sole of the products, the size is applied by stamping.  2. The boots are packed in individual bags / cardboard boxes. In each box a label with instructions for the use and maintenance of the boots is inserted. The label shall be affixed to the box with the following inscriptions: name of the manufacturing company; the name of the product; size/thickness; year/month of manufacture; the quality control sign. |  |  |  |
|  | **Protective gloves for firefighters** 200 pcs (100 pairs)   1. **GENERAL REMARKS**   The gloves must meet the requirements of **SR EN 659 + A1:2008 (EN 659:2003 + A1:2008**) **-** "Protective gloves for firefighters"based on the methods described in the related standards:  SR EN 388:2004 (EN 388:2003 ) - "*Protective gloves against mechanical risks*",  *SR EN 407:2005 (EN 407: 2004) -"Protective gloves against thermal risks*"(heat and fire).  All the mentioned standards should be understand as followed by phrase ”or equivalent”   1. **USED MATERIALS AND TECHNICAL REQUIREMENTS**   **2.1**  **Description**  The protective gloves are worn over the sleeve of the protective suit jacket, being made with 5 fingers.  The gloves are made in 4 sizes, 9-12.  For a good attachment, in the area of the wrist, it must be provided with an elastic applied to the back of the glove, and the adjustment on the sleeve of the suit is made with the help of a clamp with Velcro tape adjustment system.  Visibility is ensured by the application of retro-reflective and fluorescent bands.  At the edge of the cuff, the clips/ring for pairing and securing the gloves to the seat belt, are fastened.  The gloves are made neatly, without ends of threads or interrupted seams, and the edges of the retro-reflective bands must be finished correctly.  **2.2** **Raw materials/materials** used to make the gloves:  - palm: combination of aramid fibers doubled by a flame retardant, elastic layer, of dark-colored silicone.  - back of the palm: a combination of aramid fibers and flame retardant viscose, dark blue or black, coated (from fingertips to second phalanges) with a flame retardant, elastic, dark-colored silicone layer  On the back of the palm, the gloves should be provided with at least two shock protection, applied on the wrist between the phalanges 1 and 2, as well as on the metacarpophalangeal wrist.  When assembled, the materials must provide gloves with fire resistance, providing protection: from fire, convection heat, radiant heat, contact heat, against mechanical hazards (abrasion, cutting, tearing, puncture) and against water penetration and chemical products penetration.  The intermediate layer, to ensure the protection against the penetration of water/moisture, should be made of a non-breathable membrane (PTFE or higher type), which will allow the removal of transpiration vapors from the inside to the outside.  Materials used to make the cuff must have properties similar to those used for the outside of the glove, respectively a combination of aramid fibers and flame retardant viscose, to provide protection from radiant, contact and convection heat.  **2.3. Auxiliary materials**  - Velcro tape (loop - hook) for hand adjustment;  - flame retardant retro-reflective and fluorescent tape  - flame retardant thread for assembly of component parts;  - ring/clamp with wide opening (preferably fall arrest type), made of metal with anti-corrosive and anti-rust properties for the pairing and attachment of the gloves to the belt;  - elastic band reinforcement, applied internally for hand adjustment.  Auxiliary materials must have technical characteristics compatible with the raw materials.  **2.4** All materials used to make gloves should not cause skin irritation or any other harmful effect that would damage the wearer's health. Also, the materials used to make gloves must be resistant to conditions of intensive use, and the protective characteristics must not undergo significant changes under the influence of aging or the conditions of maintenance/use to which the equipment is normally subjected and will not emanate unpleasant smells.  The gloves must allow for washing with water at a temperature of 60°C, using detergents.  ***Note:***  ***The manufacturer/tenderer must guarantee by submitting with the technical offer declarations of conformity that they maintain their technical parameters after at least 5 washing cycles at 60° C with detergent, as well as that all the materials used to make the products have no harmful effects on the health of the users.***  **III. MINIMUM TECHNICAL REQUIREMENTS FOR GLOVES.**    **The gloves must meet at least the following performance levels according to**   * EN 407:2004 level 4 * EN 388 (or similar): at least level 2 for abrasion, cutting and perforation   **Weight**: maximum 300 g per pair  **IV. MARKING OF PRODUCTS**  **Protective gloves for firefighters** fall into **category III risk** and are subject to the procedure for assessing the conformity, rules and conditions for applying the CE marking, corresponding to the category III PPE, in compliance with Government’s Decision no. 305/2017 dated 5th of May, 2017, regarding the establishment of measures implementing the Regulation (EU) 2016/425 of the European Parliament and of the Council dated 9th of March 2016 on personal protective equipment.  The marking is made according to the corresponding chapter of EN 420, and the marking must be visible, clear and permanent throughout the foreseeable life of the glove, having the following information printed at a minimum: the CE marking accompanied by the number of the EU notified body (including category III-PPE), the name of the manufacturer; the name of the product; size indication; date of manufacture; signs regarding instructions for use and maintenance.  **Each glove must be marked with the number of standard EN 659 and the icon specific to the firefighters**.  Also, each pair of gloves will be accompanied by an information sheet provided by the manufacturer (in Romanian), which must include instructions on how to use, maintain, as well as storage and cleaning/disinfection instructions.  **V. PACKING**  Each pair of gloves is packaged individually in a textile bag/ cardboard box in which a label is applied, mentioning: manufacturer's name; the name of the product; size indication; date of manufacture; the sign of the technical quality control body. |  |  |  |
|  | **Positioning rope in "Y" for working at height – 20 pcs**  6.1. The rope is designed to prevent the fall of staff working at heights. The "Y" shape allows the person to be secured in both directions during work, and during the climbing it will always be secured in at least one direction, by the simultaneous movement of the two "arms" of the insurance  6.2. Dimensions  6.2.1. length 1,20 m – 1,70 m  6.2.2. weight: max 2.5 kg  6.3. **Component parts:**  6.3.1. carabine for catching at the person's work belt  - breaking load : min 22 kN  - opening: min 20 mm  - lock type : auto-locking system  6.3.2. shock absorber  - sarcină minimă : 5 kN  6.3.3. static rope or webbing  - breaking load: min 22 kN  6.3.4. - 2 connectors hook type with self-locking at the ends of the connection means  - breaking load : min 22 kN  - opening: min 40 mm  6.5. must comply with the requirements of SR EN 362: 2005 - Personal protection against falls from a height. Connecting parts |  |  |  |

**OTHER REUIREMENTS**

***The following technical documents will be presented:***

***a. EC Type Examination Certificate and Conformity Assessment Report and/or Test reports on the technical and physical-chemical characteristics. The technical documents must be issued by Notified Bodies at the EU level / specialized, neutral and accredited laboratories.***

***b. EC Declaration of Conformity together with the Instruction for Use, Maintenance and Cleaning/Disinfection Sheet, prepared by the manufacturer of the certified product.***

***c. Certificate of quality and Certificate of guarantee issued by the tenderer.***

***All submitted technical documents must be within their validity term on the date of submission of the technical offer, signed as certified true copies, having applied the seal of the tenderer, being accompanied by the certified translation into Romanian.***

***WARRANTY***

**The warranty period of the product is at least 12 months from the date of use, under normal conditions of use and maintenance, and under appropriate storage conditions, period for which the manufacturer guarantees that it retains its technical, functional, shape, size and color characteristics. For hidden defects, the manufacturer becomes directly responsible, having the obligation to replace the inappropriate products in maximum 45 days**.