# ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

* “Procurement of uniform sets for 22 firefighters of Berat” in the frame of the Project FIRE­-PREP
* **Publication reference** : Interreg IPA II Cross-border Cooperation Programme Greece-Albania 2014-2020, Order nr. 01 , Prot. Nr. 1346, dated 09.03.2023

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 offered specifications.

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| **Item Number** | **Description** | **Unit** | **Amount** | **Specification required** | **Specification offered** | **Notes, remarks,** | **Evaluation committee’s notes** |
| **ref to documentation** |
| **1.** | Fireproof helmet | **Pcs** | 22 | Helmets for use by firefighters for protection against fire during operational interventions must comply with international standards EN 443:2008 and EN 14458.The helmet must be of type A3B,\*\*, E2C. The helmet must be equipped with a transparent glass with luminescence color (soft shades of orange), made of PESU (polyethersulfone) material, to withstand elevated temperatures.In the interior, it must be equipped with glasses, according to EN 166. Resistance to external influences:The helmet must be equipped with a shock absorber made of polyurethane, which must be integrated into the shell of the helmet and cannot be removed. Between the shell, which must be made of composite materials (carbon fiber), and the polyurethane (integrated into the polyurethane), a second shell and an insulating foam must be integrated.The inside of the helmet - It must be made of SMC composite materials (plastic parts for reinforcements are not allowed). -To fit the head, the adjustment of the size of the helmet must be done through a regulator which must realize the size change from 52-64cm. -The external width of the helmet must be between 236mm–247mm in the ear area, the length must not exceed 316mm and the height must not exceed 216mm. - The helmet must be colored with luminescent color. -Both sides of the helmet must be equipped with a reflective strip that extends almost along the entire helmet. - The width of the tape should be between 24mm-25mm. -The helmet must be equipped with a neck guard made of carbon fiber and treated with aluminum. - The protector must be connected to the helmet through 3 points and must be easy to remove and install. - The helmet must enable the unhindered use of the breathing apparatus mask. -The total weight together with the neck protector should not be more than 1.4 kg. - The place for the logo must be defined on the front of the helmet. The size of the place for the logo should be about 65mm-80mm wide and 65mm-75mm high. -The end user logo must be factory printed on the front side of the helmet. The sticking of plastic labels (stickers) is not allowed. - The helmet must be resistant to temperatures up to 1000oC for a period of time of at least 10 seconds, in contact with the "Flash over" phenomenon, as well as tested at a temperature of 250°C for a duration of 30 minutes. -The helmet must provide full protection of the head, including the neck and face. - The chin strap must be made of nomex material and tested not to cause irritation (allergy). -The helmet must be equipped with a xenon light bulb and a corresponding holder, as well as enable the installation of the communication system. |  |  |  |
| **2.** | Protective hood under the helmet | **Pcs** | 22 | The protective hood must be certified in accordance with EN13911:2005 & EN 1149-3 standards. - Structure/composition; - Two-layer structure/construction; - 100% Aramid material; -Color: dark blue.  The size should be universal, double layer hood, single layer that comes forward like a mouthpiece, with an open circle around the face with flat hem and seam construction, with nomex thread stitching. All be a measure. The undercap must allow the mask to be placed unobstructed. The undercap should cover most of the chest, shoulders and back. |  |  |  |
| **3.** | **Fire resistant uniform** | **Set** | 22 | The sizes of the uniform sets must be :  Size L: 3 sets of uniforms  Size XL: 10 sets of uniforms  Size 2XL: 7 sets of uniforms  Size 3XL: 2 sets of uniforms |  |  |  |
|  | Fireproof jackets | Pieces | 22 | Fire Proof jackets 22 pieces:  The jacket and trousers for fire protection must be manufactured and certified in accordance with EN 469:2005, level 2 protection. In addition, the fire protection jacket must also meet the standard EN 469:2005, appendix B. Producers or the entity that handles these products is obliged to present valid product certificates. On the jacket, on the back, in the upper part, there will be a strip measuring 15 cm in height, and as wide as that between the seams. The color of the tape will be metallic gray, on which it will be written in capital letters "MZSH". The writing will be dark blue. The dimensions of the writing will be 10 cm high and 1.8 cm wide, in proportion to the body measurements of the uniforms; The front of the jacket should be sewn horizontally across the chest. A radio receiver pocket should be placed on the front, approximately 2cm to the left of the front bar; About 9cm above the radio pocket, a 7.5x3cm strip should be placed which will serve as a microphone holder and should be of the upper material; In addition, on the right side of the front part under the horizontal seam, the light bulb holder should be located; - The approximate dimensions of the pocket should be 5.5cm deep, 8.5cm wide and about 19cm high. The pocket at the top and bottom is open. In the upper part, it is fixed with the help of a strip with a dimension of 5.5x11cm, with a velcro strip.  rear (back) The back should be divided horizontally into two sections. The inscriptions on the back should be in one or two lines where the size of the letters should be about 6cm. The color of the background should be bright yellow, while the color of the letters should be silver: "MZSH" or any other inscription according to the agreement must be written on the tape; The inscription on the back should be attached with velcro or permanent; Long jacket, the minimum length of the jacket will be 92cm. Side pockets The side pockets must be tucked inside and covered with flaps (approximately 22x7.5cm). Both flaps at the bottom should be closed with velcro tape. A strap with a swivel head carabiner should be located on the pocket flap (size about 7.5cm). The jacket must be completely fitted with a permanent fire-resistant lining. The lining should not be attached at any point to the seams. In the front, on the right side of the lining, there should be a pocket from the upper material (external) with dimensions of approximately 18x2cm, with a lid that closes with a 2x2cm velcro tape. One opening for repair should be located on the back with a width of about 54cm, while the other opening on the right side with a width of about 28cm. Detailed description in outline It must be resistant to high temperatures according to EN 469; The feet should be made of moisture-proof and fire-resistant material; Wide sleeve cuffs, for comfortable actions; With durable and fire-resistant type zipper and covered with a cap; The collar and elbows should be reinforced;  To have a chest pocket for the radio, with a protective cover, as well as two side pockets with a cover.  THE MATERIALS Composition of outer layer materials The weight of the outer layer material should be about 195g/m2, which is a mixture of 100% aramid yarn (with a content of at least 23% paraaramid and 2% carbon yarn dark blue color similar to RAL 5004) or equivalent . Color: dark blue. Material for preventing the penetration of fluids. It should be microporous PTFE membrane, with fine layers of high performance polymers in the carrier material composed of 50% aramid and 50% melamine closed, silicone foams for distance maintenance or equivalent. Welding seams with double-layer tape. The carrier material for seam welding should be a two-component microporous membrane from expanded polytetrafluoroethylene. The impermeability testing of seam overlaps must be done after 10 treatments (washing at temp. 60 °C in accordance with the EN 26330/2A standard and 10 dry cleaning cycles in accordance with the DIN EN ISO 3175:2000mm standard, for a duration of 2 minutes and pressure 0.2bar). Liner (English: Lining): Nomex 50%/viscose FR 50%, 110 g/m² Absorption barriers (English: Absorption barriers) They must be made of a breathable PTFE membrane, wrapped on both sides by laminate aramid, durable in washing and dry cleaning. Protectors (pads or cushions): Protective shoulder pads serve as shock absorbers and should be made of permanently flame retardant materials, non-absorbent plastics that do not absorb moisture throughout their life and be as light as possible. They must be tested according to the EN 532 standard and after the test there must be no hole formation, no flash or melting points, no flash at the top or edges. Thermal resistance according to EN 469; appendix A: no melting, no dripping or flashing. Other accessories Zippers Jacket: The jacket chain must be equipped with a panic patent, as well as metal teeth with a size of 8mm. Velcro straps for fastening (closure) The velcro straps must be resistant to fire, washing and dry cleaning.  Sewing feet They must be flame resistant, 100% meta aramid material for all seams, and the color must be identical to the color of the outer material.  Reflective strips The reflective strips must be a combination of yellow/silver/yellow colors, and their properties must meet the requirements of HuPF 09/99, point 2.6, 2.5.1.1 and 2.6.1.2. Collar The collar should be approximately 12cm high in the back, and 10cm in the front. The closing of the collar is done with the help of strips (pieces) of velcro material which are placed under the front covers to cover the chain. The width of the collar should be adjusted with the help of a tape. The ribbon must be made of the same material as the outer layer of the jacket, while a ribbon used for hanging the jacket must also be sewn on the upper inner edge of the collar.  creek Cuffs with a width of about 12 cm should be sewn on the sleeve. The cuffs must be equipped with waterproof structures, in which the inner part of the cuff from the wrist must be of a knitted material and located inside the sleeve. Impediment to the penetration of moisture into the inner lining must be ensured, which must be done through a functional incorporation of moisture barriers, made of the same material as the outer layer of the jacket. The inner cuff, made of knitted material, should be double-layered and have a round opening for placing the thumb. The knitted material must be made in such a way as to prevent the threads from coming out (dislodgement). The final length should be approximately 18cm, and the diameter approximately 6.5cm. The material used must be of quality aramid (93% meta aramid, 5% para aramid, 2% carbon fiber or similar). The color should be dark blue. |  |  |  |
| Fire resistant pants | **Fire resistant pants 22 pairs :**  They must be certified in accordance with EN 469 standards. Fire protection trousers should be high-waisted, the legs should be made of moisture-wicking and fire-resistant material, and the waist should be lined with elastic, suitable for a good fit at the waist. The trousers in the front end with a wide band about 6cm, which in the back goes widening up to 12cm to protect the kidneys. The belt must be made on both sides from the upper (outer) material. Both sides must be equipped with elastic bands, 4cm wide and 12cm long. In the front part of the belt, on the right and left sides, it should be sewn from a strip (the seam should be made in the form of an envelope). At the left end of the belt pair there should be a strip with a buckle that serves as an extension and additional reinforcement. Two strips with velcro fastening are sewn in the middle of the waistband at a distance of approximately 7cm, sewn in the shape of an envelope. The 5cm wide fastening mechanisms ("cleats") are fixed with plastic clips on the front and back straps. The fastening mechanisms are held together at the back with the help of a clip.  POCKETS  Side pockets The trousers must be equipped with pockets ("bulging"), left and right above the knee level. The pockets are straight, the depth of which reaches about 5cm and they are closed with flaps with dimensions of 6x18cm and velcro closure. An additional pocket for a knife should be integrated in the right pocket. On both sides of the trousers, the pockets must be equipped with tape-shaped fillets. Pants should also have pockets on the top.  Pants legs The front, lower part of the pants, in the area of the knees, must be equipped with reinforcements made of silicone/carbon material. "Pillows" should be placed under this reinforced material, which should have an ergonomic shape and be made of flame-resistant, non-absorbent and waterproof material. The shape of the pillow should be ergonomic and allow easy and unhindered movement in all directions. Diameter approximately 14cm high, 22cm wide and thickness about 1cm. Reflective strips (phosphorescent) The trousers must be equipped with one continuous phosphorescent strip with a width of about 7.5cm which should be placed horizontally under the reinforcement of the knee part and with one triple reflective strip with a width of 5cm which should be placed on the sides of the legs starting from the upper edge of the horizontal strip that ends at the bottom of the side pockets.  Belts holding the pants Pants belts must be made of wide elastic rubber material. The fastening of the trousers must be done through special fasteners made of a temperature-resistant plastic. |  |  |  |
| Fireproof boots | FIRE PROTECTIVE BOOTS 22 pairs :  They must be certified according to EN ISO 15090:2012 F2A HI3 P T CI AN SRC EN ISO standards. The boots must be made of high-quality black leather material, and must be equipped with straps on the side for easier and faster dressing. Between the lining and the outer skin, the boots must be equipped with a waterproof and flame-resistant membrane. Be equipped with reflective tape.The boots must be resistant to water, heat, oils, derivatives, as well as being antistatic.  Sizes: Number 40 ( 2 pairs of boots)  Number 41 (3 pairs of boots)  Number 42 ( 4 pairs of boots)  Number 43 ( 8 pairs of boots)  Number 44 ( 3 pairs of boots)  Number 46 ( 2 pairs of boots) |  |  |  |
| Fire resistant gloves | Fire resitant gloves for fire protection 22 pairs:  They must be certified in accordance with the standards: EN 659:2003. Structure/composition: Waterproof structure – liner, ("liner construction") They must be absolutely waterproof and have high ventilation activity which the membrane must offer; They must be made of high-tech materials; Extreme wear protection on the inside of the hand; To guarantee protection from heat and cold; The back of the hand should be specially designed to allow optimal work without tension; There should be double insulation in the exposed area, especially the back of the hand; Additional finger protection from kevlar material reinforced with additional materials. |  |  |  |
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| **4.** | Winter Coat | **Pieces** | 22 | The Winter Coat has an inner layer, it is dark blue in color. From the chest area to chest height and through the back, it is reinforced and has an inner layer that reaches the end of the sleeve. In the lower part of the coat on both sides there are two deep pockets with flaps. The winter coat is the right length to fit and reaches above the knees.The sizes will be comfort standards, classified with divisions: S, M, L, XL, 2XL.  Size L: 3 pieces  Size XL: 10 pieces  Size 2XL: 7 pieces  Size 3XL: 2 pieces  The color of the uniform will be according to the determination of CMD No. 1153 dated 24.12.2020 |  |  |  |
| **5.** | **Summer work suits** | **Set** | 22 | The sizes will be comfort standards, classified with divisions: S, M, L, XL, 2XL as following:  Size L: 3 sets  Size XL: 10 sets  Size 2XL: 7 sets  Size 3XL: 2 sets  The color of the uniform will be according to the determination of CMD No. 1153 dated 24.12.2020.Summer work suit, material must be thick coton fabric, dark blue color, stitched with blue which includes (jacket, pants and hat). |  |  |  |
|  | Jacket |  |  | The auxiliary materials that must be used for the production of the article "Jacket" are: -Thick cotton fabric knits; - Sewing pen, dark blue; -Velcro "female" in dark blue color. The jacket item "Summer work suit" is produced based on body lengths and ordered by the user in the corresponding quantities according to the chest numbers, which the manufacturing entity is obliged to respect exactly. The correct dimensions of the elements, which are part of the construction of the article "Summer work suit", are: - The jacket consists of a collar, back, sleeves, chest, sleeve cuffs, front border, lower side pockets, on the left chest there is a rectangular "female" velcro in black color, the lower border and the inner lining, phosphorescent strips on the left and right arm, phosphorescent strip on the upper chest and phosphorescent strip is on the bottom of the sweatshirt. -The front left and right chest has a metallic grey phosphorescent strip measuring 6cm wide, on both sides along the entire length, the decorative seams are passed 5mm away from the edges. On the left side of the chest is placed the chest pocket for radio 15x3cm. Blue velcro is placed above the radio pocket for placing the name tag. - Back in the upper part, a strip measuring 15 cm in height, and as wide as that between the gavatures, will be placed. The color of the tape will be metallic gray, on which it will be written in block letters "FIREFIGHTERS". The writing will be dark blue. |  |  |  |
| Pants | The trousers are dark blue, with a wide cut, with the same composition as the jacket; In the upper part, on the left and right side, they have a pocket with a slanted cut; On the left side and on the right side, at the height above the knees, two harmonically shaped pockets with flaps are sewn, which are fastened with stickers. |  |  |  |
| Caps | The caps must be thick cotton fabrics dark blue, sewn with dark blue pe; - The auxiliary materials that must be used for the production of the article "Caps " are: -thick cotton fabrics , dark blue; - sewing pen, with the color of the fabrics ; -The logo of the ‘’ coat of arms’’ placed in the cap. |  |  |  |
| Long Sleeve Cotton T-Shirts | The long-sleeved shirt must be cotton, dark blue in color, sewn with dark blue threads. The auxiliary materials that must be used for the production of the article "Long-sleeved T-shirt" are: - Dark blue cotton; - Dark blue sewing pen; - The blouse consists of a round collar, long sleeves. On the chest on the left side, dark blue "female" velcros are placed, for fixing the "MZSH" emblem; - The collar of the blouse has a closed round shape. The collar consists of a reinforced strip; -The back of the blouse is straight across the entire surface. The spine at the end is closed with a seam 3–5 mm away from the edges by folding the piece twice; - The long sleeves consist of the main part of the sleeve and the part of the border with a width of 3.5 cm. |  |  |  |
|  | Short Sleeve Cotton T-Shirt | The T-shirt with short sleeves is dark blue in color, with short sleeves and made of 100% cotton material. -On the front, on the left side, at the height of the chest, a logo with the capital letters "MZSH" is sewn. |  |  |  |
| **6** | **Winter work suits** | **Set** | 22 | The sizes will be comfort standards, classified with divisions: S, M, L, XL, 2XL as following:  Size L: 3 sets  Size XL: 10 sets  Size 2XL: 7 sets  Size 3XL: 2 sets |  |  |  |
|  | Winter Jackets ( pieces 22) | Pieces | 22 | The auxiliary materials that must be used for the production of the article "Jacket" are: -Thick cotton fabric knits; - Sewing pen, dark blue; -Velcro "female" in dark blue color. The jacket item "Summer work suit" is produced based on body lengths and ordered by the user in the corresponding quantities according to the chest numbers, which the manufacturing entity is obliged to respect exactly. The correct dimensions of the elements, which are part of the construction of the article "Summer work suit", are: - The jacket consists of a collar, back, sleeves, chest, sleeve cuffs, front border, lower side pockets, on the left chest there is a rectangular "female" velcro in black color, the lower border and the inner lining, phosphorescent strips on the left and right arm, phosphorescent strip on the upper chest and phosphorescent strip is on the bottom of the sweatshirt. -The front left and right chest has a metallic grey phosphorescent strip measuring 6cm wide, on both sides along the entire length, the decorative seams are passed 5mm away from the edges. On the left side of the chest is placed the chest pocket for radio 15x3cm. Blue velcro is placed above the radio pocket for placing the name tag. - Back in the upper part, a strip measuring 15 cm in height, and as wide as that between the gavatures, will be placed. The color of the tape will be metallic gray, on which it will be written in block letters "FIREFIGHTERS". The writing will be dark blue. |  |  |  |
|  | Pants ( pieces 22) | The winter trousers are dark blue, with a wide cut, with the same composition as the jacket; In the upper part, on the left and right side, they have a pocket with a slanted cut; On the left side and on the right side, at the height above the knees, two harmonically shaped pockets with flaps are sewn, which are fastened with stickers. |  |  |  |
|  | Caps (pieces 22 ) | The caps must be thick cotton fabrics dark blue, sewn with dark blue pe; - The auxiliary materials that must be used for the production of the article "Caps " are: -thick cotton fabrics , dark blue; - sewing pen, with the color of the fabrics ; -The logo of the ‘’ coat of arms’’ placed in the cap. |  |  |  |
|  | Pants’ belt ( pieces 22) | The trouser belt is made of black leather, 3cm wide and with a metal buckle. |  |  |  |
| **7** | Summer and winter shoes | **Pair** | 44 | The shoes are made of leather with moisture resistance, and with a thickness of 1.8–2.0mm and consists of the front part, the back part, the neck, with a closed tongue which are composed of two layers of step, bottom and John. The front part is made of leather layer with thermo-reinforced layer. The neck, namely the front part of the shoe is made with leather linings. At the height of 5 cm from the bottom of the shoe, the edges are reinforced by the joint with hard leather or other material between the lining and the face, while the upper part of the neck, around the joint as a whole between the face and the lining with reinforcement. The sole layer is anatomically shaped.  Summer shoes:  Sizes: Number 40 ( 2 pairs of summer shoes )  Number 41 (3 pairs of summer shoes)  Number 42 ( 4 pairs of summer shoes)  Number 43 ( 8 pairs of summer shoes)  Number 44 ( 3 pairs of summer shoes)  Number 46 ( 2 pairs of summer shoes)  Winter shoes:  Sizes: Number 40 ( 2 pairs of winter shoes )  Number 41 (3 pairs of winter shoes)  Number 42 ( 4 pairs of winter shoes)  Number 43 ( 8 pairs of winter shoes)  Number 44 ( 3 pairs of winter shoes)  Number 46 ( 2 pairs of winter shoes) |  |  |  |
| **8** | V-neck sweater | **Pcs** | 22 | The pullover must be made of knitted fabric, dark blue, material, with a "V" collar. I. CONSTRUCTION OF THE "V" NECK SWEATER - The sweater consists of a V-shaped collar, sleeves, back, chest, shoulders and forts, and a dark blue knit on the shoulders and elbows; - The bottom line of the sleeves and the sweater ends with a border with elastic knitting for adaptation and shape retention according to the perimeters; -On the upper left wing is placed the round coat of arms with capital letters "MZSH"; - Above the right chest is placed "female" velcro in the shape of a dark blue rectangle; -V-shaped collar, sleeves, back and chest are prepared by means of the knitting process; - The straps have arched tops and are placed on both shoulders; -The back consists of an upper and a lower part. For reinforcement, the upper part of the spalin is fitted with a collar (adhesive textile material); -Spalina has a length of 13.7 cm and a width of 5 cm; 5mm away from the edges, a decorative seam is passed to the skirt; -The straps must face up, as well as the upper straps, a "female" velcro in dark blue color is placed on the top and a "male" velcro in dark blue color from below for fixing on the shoulder with the corresponding "female" velcro placed on the shoulder . |  |  |  |
| **9** | Arm label | **Pcs** | 22 | Specifications of the coat of arms of the MZSH: It is presented with a black eagle in the upper part, a hydrant in the right part, in the center it represents the image of a flame, the symbol of stairs and an ax, in the lower part with capital letters "MZSH", in the color of yellow, on the left the image of salvation. |  |  |  |
| **10** | Chest tag | **Pcs** | 22 | DEFINITION OF SURNAME: placed on the left front of the uniform. |  |  |  |
| **11.** | Hat tags | **Pcs** | 22 | This emblem is placed on the front part of the hat. LOGO OF THE Berat MUNICIPALITY. |  |  |  |