REPUBLIC OF ALBANIA

MINISTRY OF INTERIOR
GENERAL DIRECTORATE OF STATE POLICE

TECHNICAL SPECIFICATIONS

ARTICLES

HIGH VISIBILITY ACCESSORIES FOR THE EMPLOYEES OF THE STATE POLICE

CEREMONIAL GLOVES FOR THE EMPLOYEES OF THE STATE POLICE

LEATHER WINTER GLOVES FOR THE EMPLOYEES OF THE STATE POLICE

TACTICAL VEST FOR THE EMPLOYEES OF THE STATE POLICE

LIFE VEST FOR THE EMPLOYEES OF THE STATE POLICE

OPERATIONAL BIB FOR MEN AND WOMEN FOR THE EMPLOYEES OF THE STATE POLICE

CEREMONIAL LEATHER BELT FOR THE EMPLOYEES OF THE STATE POLICE

TACTICAL BELT FOR THE EMPLOYEES OF THE STATE POLICE

UNIFORM' SUIT LEATHER BELT FOR THE EMPLOYEES OF THE STATE POLICE

The *Technical Specifications* of the above articles have been drafted in accordance with the *D.C.M No. 55 dated.27.01.2016 2016 and D.C.M No. 287 dated.10.05.2019*. These *Technical Specifications* present in detail the basic technical requirements necessary for the construction of the prototype and the production of the articles.

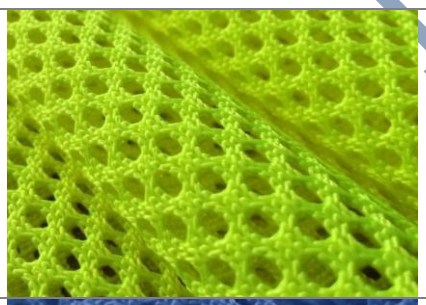
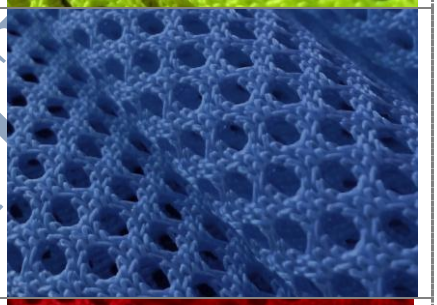
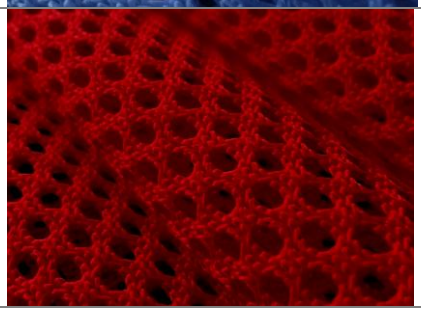
The *Technical Specifications* also define the technical requirements of the accessories that must accompany the article.

The manufacturers are obliged to implement all the technical definitions of this document.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
High visibility accessories

1. MATERIALS

a. The base material that will be used for the production of the article *high visibility accessories* should be of the highest quality and with the following technical specifications:

Base fabric for the vest		
Color	(green lime)	
	blue	
	cherry red	
Composition	100 % polyamide	
Weave type	mesh	
Weight gr/m² (±5%)	200 gr/m²	
Color fastness	Nota 4 - 5 (gray scale)	Dyeing should be applied to the yarns.
Light fastness (UV radiation)	Nota ≥ 6 (blue scale)	The fabric should be highly resistant.
Rub fastness	over 15000 cycles	
Pilling effect	grade 5	

Base fabric for the hat cover and oversleeves	
Color	Green lime
Composition	100% polyamide

Weave type	Twill	
Weight gr/m² (±5%)	150 gr/m²	
Waterproof rating	over 10,000 mm	
Color fastness	nota 4 - 5 (gray scale)	Dyeing should be applied to the yarns.
Light fastness (UV radiation)	Nota ≥ 6 (blue scale)	The fabric should be highly resistant.
Rub fastness	over 15000 cycles	
Pilling effect	grade 5	

Note: *Refer to the Annex at the end of this document for a full list of testing methods and tests that should accompany the article.*

The color of the fabric of the final product should be identical to the sample provided by the participant entity in the *technical bid*. It shall be subject to tests of wash, rub, chemical agent, sweat and light (UV radiation) fastness. The degree of the colorfastness of the fabric should be: *resistant - degree 4* and *very resistant - degree 5*. The degree of light fastness of the fabric should be: *no less than the degree 6; very good*. A simple rubbing fastness test will also be conducted on each sample provided in the *technical bid*. Each colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the colored fabric doesn't stain the white cloth.

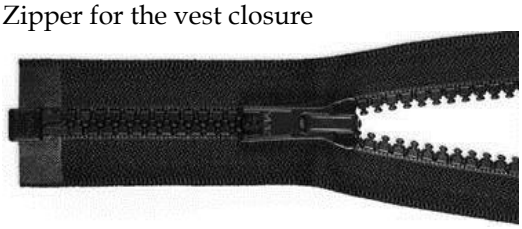
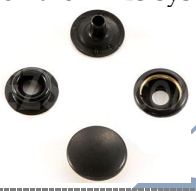
The *quality control group* will not approve the use of fabrics and materials where the following defects may be present (the list is not exhaustive):

- *Velcro* loop tapes that ravel quickly,
- organic based impurities,
- oil or ink stains,
- color shading,
- oxidations,
- wrinkles,
- absence of warp and weft threads,
- slubs and nubs of warps and wefts,
- surface holes,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

b. Auxiliary materials and accessories that shall be used for the construction of the item the *high visibility accessories:*

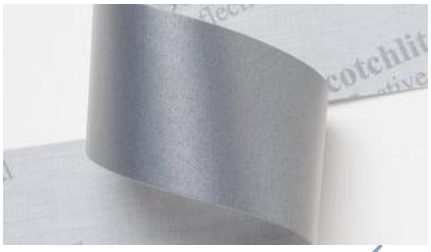
VEST

Fabrics		
Pouches and back plate for the writing of the word POLICIA	Color	black
	Composition	100 % polyamide
	Weight (±5%)	250 gr/m²
	Weave type	oxford
	Treatment	hydrophobic
Rubber material for the sniper shoulder cushion (red vest only)	Color	black
	Composition	100% polyvinyl chloride PVC

Filling for the sniper shoulder cushion (red vest only)	Composition	100% polyester
	Thickness (compatible with tactical vest standards)	≈ 1 cm
Other accessories		
Zipper for the vest closure 	Type	standard, upward closure
	Teeth size	8 VS or 10VF
	Fabric composition	100% polyester
	Teeth composition	100% acetal
	Color	black
"D" type ring 	Composition	100% Iron, rust - free
	Color	black
Fastner for the gun holster 	Composition	100 % acetate
	Color	black
	Type	for tactical use
Piping for the outlining of the vest body, pouches and back plate. 	Composition	100 % polyester
	Width	1.5 cm (0.7 cm stitched)
	Color	black
Metal rivets for the fastening of the pouches on the PALS system. 	Composition	brass (alloy of copper and zinc)
	Color	black, matte
	Caution! *The rivets should be appropriate for the fabric in which they will be hooked up.*	
Tactical tapes for the construction of the PALS system on the vests and pouches. 	Color	green lime (same as the vest)
		blue (same as the vest)
		cherry red (same as the vest)
		black (same as the pouches)

Composition	100% poliamide
Trashësia	2.5 cm

Reflective tape



Color	silver grey
Width	≈ 5 cm
Composition	100 % polyester
This product should have certification for its highly reflective properties in accordance with the standard ISO 20471:2013	
The material should be resistant to over 105 washing cycles under normal conditions at 60 °C.	
The tape should be visible at a distance of over 150 m.	

Threads

Sewing threads for all stitches.

Composition	100% polyester
Number	60 Nm
Pull resistance	not less than 12N
Color	black
	green (same as the vest)
	blue (same as the vest)
	cherry red (same as the vest)

Velcro

Velcro hook and loop tapes for the vest and pouches

Velcro size	for the pouch closure	follow the flap shape
	Velcro for the number and chest rank insignia. (2 pcs/vest)	8.6 cm x 3 cm
	for the shoulder top adjustments tapes	follow the shoulder top shape
	for the side adjustments tapes	4 cm wide tapes

Composition	100% polyamide fibers	
Color	green (same as the vest)	
	blue (same as the vest)	
	cherry red (same as the vest)	
	black (same as pouches)	
Thickness of the tapes when fastened	± 3 mm	
Linear weight	41 g/m ± 5 %	
Loop tape thickness	2.2 mm	
Hook tape thickness	1.6 mm	
Resistance under extreme temperatures.		
Cold	- 30 °C	
Hot	weak point: 180 °C	
	melting point: 210 – 250 °C	
Color fastness		
wash fastness	no less than 3	
hot water fastness		
sweat fastness		
rub fasteness		

Stamp

Writing POLICIA on the flap of the pouch	Stamping with reflective dye	
	Color	silver grey
	Reference size	≈ 2cm x 11 cm
	Font type	Myriad Pro Bold
	The material should be resistant to over 105 washing cycles.	
Writing POLICIA on the back plate	Stamping with reflective dye	
	Color	silver grey
	Reference size	≈ 4.2 cm x 22 cm
	Font type	Myriad Pro Bold
	The material should be resistant to over 105 washing cycles.	

Label

Fabric label for identification of the producer, for the maintenance instructions, article size and base material.	Composition	100% polyester
	Color	white/black

HAT COVER

Reflective tape

Reflective tape.	Color	silver grey
	Width	5 cm

	Composition	100% polyester
	This product should be certified as a highly reflective material according to the following standards: ISO 20471:2013	
	The material should be resistant to 105 normal wash cycles at a temperature of 60° C.	
	The tape should be visible from at least 150 m.	

Threads

Threads for all seams.	Composition	100% polyester
	Metric number	80 Nm
	Pull resistance	no less than 12 N
	Color	same as fabric

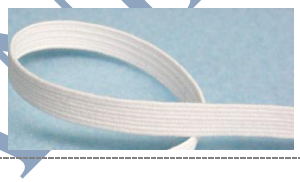
Other accessories

Thermal fusion welding tape for critical stitches. 	Triple layered	nylon
		PTFE
		thermo-adhesive layer
	Color	same as fabric
	Width	2 cm
	Thickness	0.2 mm
	Good breathability and water resistant.	

Transparent PVC material

Transparent plastic material for the window of the cover.	Composition	100% polyvinyl chloride (PVC)
	Thickness	1 mm

Elastic tape

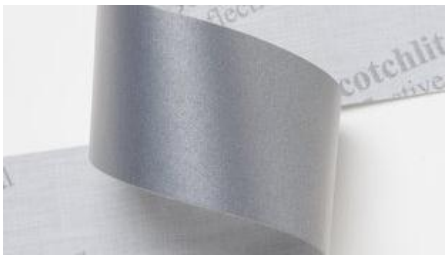
Elastic tape 	Composition	100 % polyester
	Thickness	1 cm

Label

Label made with fabric for the identification of the manufacturer, size, gender, composition and maintenance instructions.	Composition	100% polyester
	Color	white

OVERSLEEVES

Reflective tape		
Reflective tape.	Color	silver grey

	Width	5 cm
	Composition	100% polyester
	This product should be certified as a highly reflective material according to the following standards: ISO 20471:2013	
	The material should be resistant to 105 normal wash cycles at a temperature of 60 °C.	
	The tape should be visible from at least 150 m.	

Threads		
Threads for all seams.	Composition	100% polyester
	Metric number	80 Nm
	Pull resistance	no less than 12 N
	Color	same as fabric

Other accessories		
Thermal fusion welding tape for critical stitches. 	Triple layered	nylon
		PTFE
		thermo-adhesive layer
	Color	same as fabric
	Width	2 cm
	Thickness	0.2 mm
	Good breathability and water resistant.	

Transparent PVC material		
Transparent plastic material for the window of the cover.	Composition	100% polyvinyl chloride (PVC)
	Thickness	1 mm

Elastic tape		
Elastic tape 	Composition	100 % polyester
	Thickness	1 cm

Label		
Label made with fabric for the identification of the manufacturer, size, gender, composition and maintenance instructions.	Composition	100% polyester
	Color	white

c. Objects that shall be used for the packaging of the article *high visibility accessories:*

Plastic bag for each accessory
Cardboard box for the storage of many accessories

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request*

2. SIZES AND QUANTITY

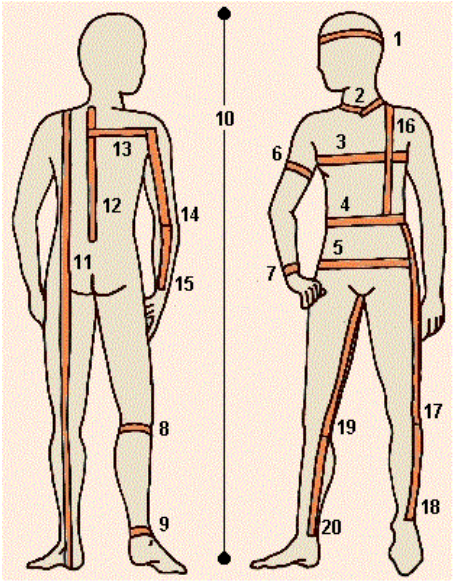
The articles *reflective accessories* will be ordered and manufactured in the following sizes:

- Reflective vests in four standard sizes: XS/S - M/L - XL/XXL - XXXL
- Hat cover for the uniform hat for men for three main sizes of the hat: 1 (53/54/55), 2 (56/57/58), 3 (59/60/61)
- Hat cover for the uniform hat for women for three main sizes of the hat: 1 (53/54/55), 2 (56/57/58), 3 (59/60/61)
- Over sleeves in one single size: 19 x 28 cm

The accessories will be manufactured in the quantities that will result from measurements of the employees of the *State Police*

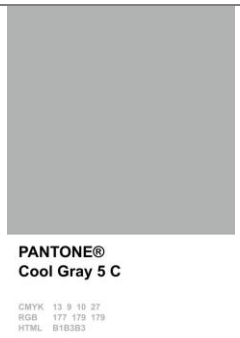
Taking the measurements

The following measurements should be taken in order to determine the sizes for this article:



2	Around collar	cm.
3	Chest	cm.
4	Waist	cm.
5	Hip	cm.
6	Around arm	cm.
10	Full height	cm.
12	Back length	cm.
13	Half across back	cm.
14	Shoulder to elbow	cm.
15	Forearm	cm.
16	Natural waist length (shoulder to waist)	cm.
	Top shoulder length	cm.

3. PANTONE COLORS

		
Blue color for the fabric and accessories of the blue vest.	Green lime color for the fabric and accessories of the green vest, oversleeves and hat cover.	Cherry red color for the fabric and accessories of the red vest.
		
Grey color for the reflective tape and stamp (fluorescent).	Black color for the fabric of the back plate, pouches and piping.	
The colors specified in this document serve as a reference for the manufacturer. They will be approved upon delivery of the prototypes.		
Warning! Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.		

4. THE PROCESSING AND PREPARATION OF BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

Pattern-making

Pattern-making should be done by following the standard methodologies for garment construction. The component parts of the item/ product must be compatible with each other and have clear visible lines of cutting and joining. All components must be positioned on the textile in the direction of the warp.

Cutting

During the process of cutting there should not be any shifting in the last sheets of the mattress. It's recommended that the mattress contain no more than 100 sheets. Special attention must be observed during the cutting of curved sides so that the edges are devoid of any serration.

Marking of the item's components

This process should guarantee that all the components of the product have the same color and tone without any visible shading.

5. CONSTRUCTION OF THE ACCESSORIES

Technical instructions for the production of the high visibility accessories.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.

VEST


12345
POLICIA
POLICIA


POLICIA

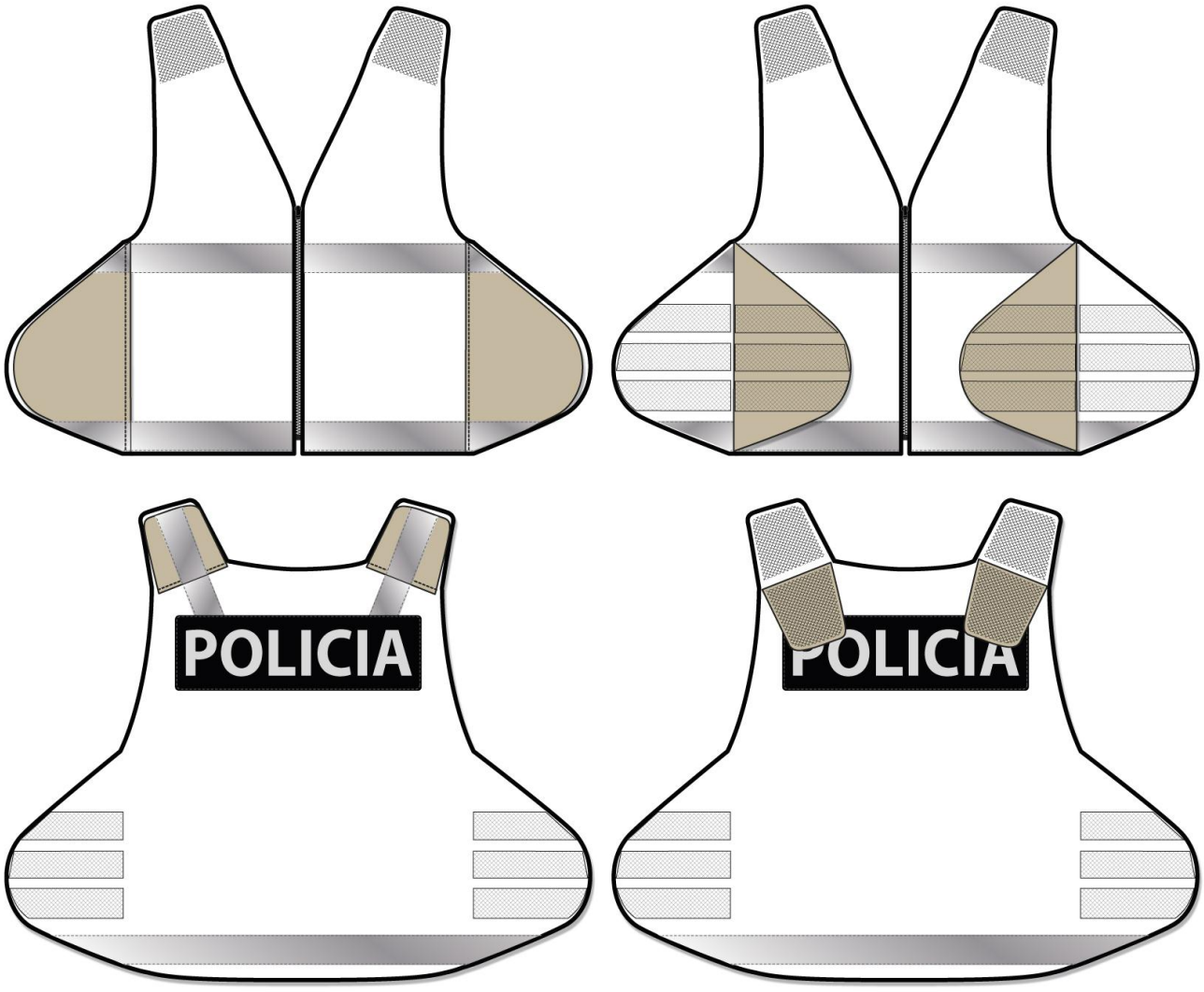

12345
POLICIA


POLICIA

The vest should fulfill all the technical and quality parameters of tactical and high visibility clothing. The vest may be used with or without the pouches and holster, depending on the requirements of the tasks to be performed on assignment.
The components of the vest:

- Two front pieces
- The back piece
- The sniper shoulder cushion (only for the red vest)
- Tactical webbing (PALS system)
- Reflective tape
- Stamps
- *Velcro* elements
- Tactical pouches

– The body of the vest should be made from a double layer of mesh fabric stitched at the seams and outlined with piping.
– The vest should have a zipper closure.
– The vest should have *Velcro* elements at the shoulders and at the sides to help with the adjustment of the vest to the body size of the user.

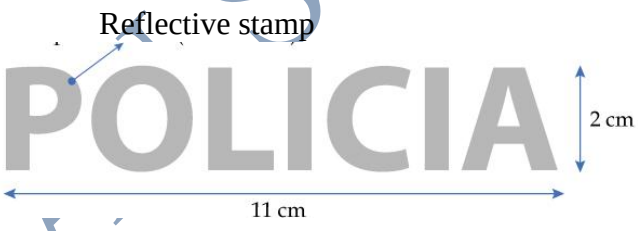


Positioning of Velcro tapes

- The red vest should have a rubber layer stitched on the right side of the chest for the sniper shoulder cushion. The sniper shoulder cushion should be filled on the inside with a soft protective layer, reinforced on the outside with vertical straight stitches that create an undulating pattern.
- The vest should be equipped with the PALS system (Pouch Attachment Leader System), with tactical webbing in the chest, abdomen and sides for the attachment of the tactical pouches, gun holster, cameras, radios, flashlights and other equipment in use by the *State Police*. The webbing should have reinforced vertical straight stitches every 38/40 mm.
- The chest should be equipped with two reflective tapes stitched along the perimeter of the body and two reflective tapes stitched vertically in top and back of the shoulders.

Construction of "PALS" system

THE WORD "POLICIA" ON THE FRONT FLAP OF THE POUCH

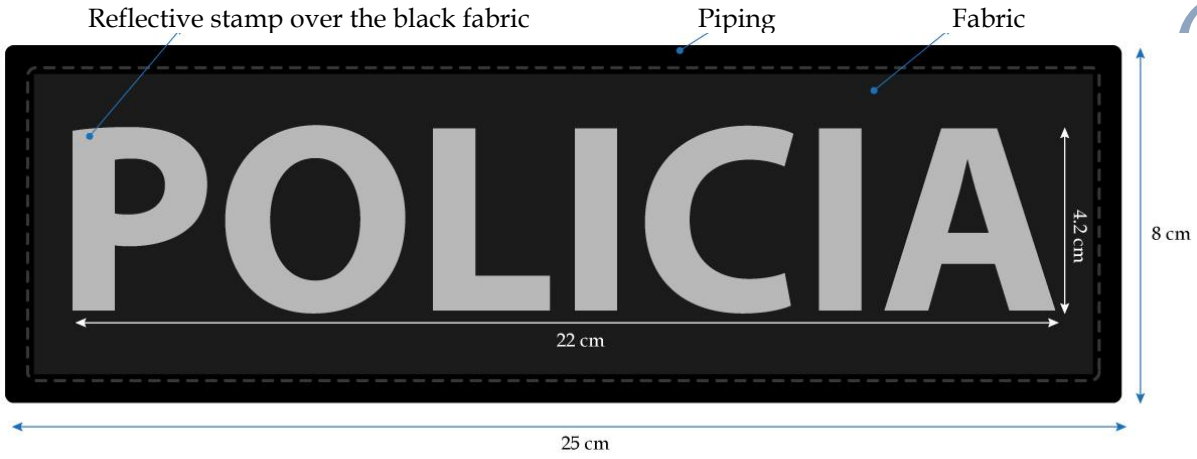


- The word POLICIA should be stamped on one of the small pouches
- The letters should be all caps while the font should be *Myriad Pro Bold.*
- The word POLICIA should not be stretched in either direction. The writing should strictly follow the proportions specified by the font. Refer to the illustration for the exact measurements of the writing..
- The stamp should be made of grey color fluorescent material, the same as the reflective tape.. The stamp should be of the highest quality and should not lose its reflective property from prolonged use.

THE WORD "POLICIA" ON THE BACK

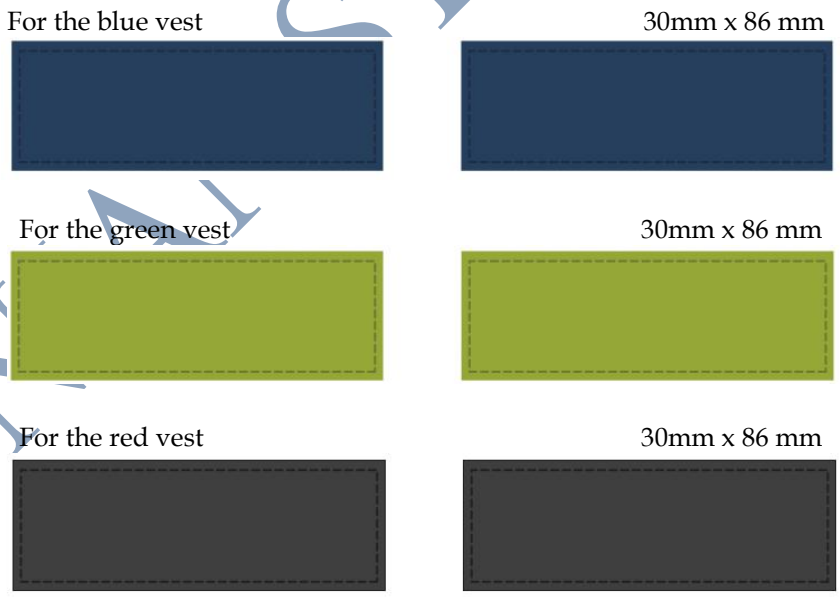
- The word POLICIA should be stamped on the back panel, at the shoulders.
- The letters should be all caps while the font should be *Myriad Pro Bold*.
- The word POLICIA should not be stretched in either direction. The writing should strictly follow the proportions specified by the font. Refer to the illustration for the exact measurements of the writing.

- The stamp should be made of grey color fluorescent material. The stamp should be of the highest quality and should not lose its reflective property from prolonged use.
- The fabric on which the word POLICIA will be stamped should be black and outlined with black piping.



THE VELCRO ELEMENTS

- Each vest should be equipped with two *Velcro* hook tapes, one for the placement of the identification number and one for the placement of the chest rank insignia. The color of the *Velcro* tapes should match the color of the fabric.



Tactical pouches

Large pouch	
Quantity	1/vest
Pouch size	≈ 15x21x4 cm
Flap size	≈ 6 x 15.5 cm
Attachment	"PALS" system
Closure	*Velcro*
The large pouch should be appropriate for holding of a ticket notebook or tablet or any other equipment in use by the *State Police*. The pouch should have a tactical tape stitched on the right side for the holding of a pen.	

Small pouches	
Quantity	2 pcs/vest
Pouch size	≈ 15x9.5x4 cm
Flap size	≈ 6 x 15.5 cm
Attachment	"PALS" system
Closure	*Velcro*
Stamp	One of the pouches should have the word POLICIA stamped on it flap
The pouch should be appropriate for holding of different equipments in use by the *State Police*.	

Adjustable radio pouch

Quantity	1 pc/vest
Pouch size	adjustable
Attachment	"PALS" system
Closure	*Velcro*

The adjustable radio pouch should be mounted on the PALS webbing via the tactical tapes.
All fabric parts of the pouch should be adjustable with *Velcro* tapes and may fit various radio sizes in use by the *State Police*.

Magazine pouches for automatic rifles

Quantity	1 pc/vest
Pouch size	Should be appropriate for holding automatic rifle magazines in use by the *State Police*.
Attachment	"PALS" system
Closure	*Velcro*
Type	2 magazine pouch

One pouch should hold two magazines. The flap of the pouch should be equipped with Velcro elements that will fit the size of the magazines in use by the police officer.
The pouches should be equipped with elastic tapes the magazines tight and prohibit the free movement of the magazines inside the pouch.

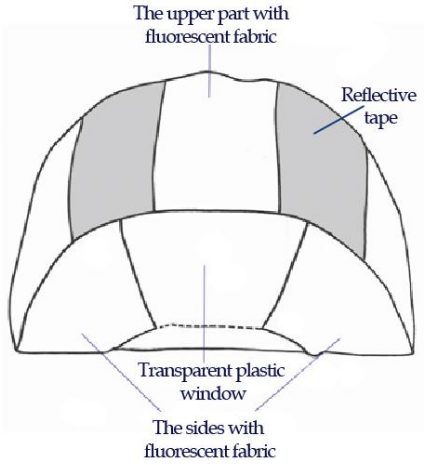
Tactical gun holster	
Quantity	1 pc/vest
Size	Appropriate for guns in use by the *State Police*
Attachment	"PALS" system
Closure	Plastic fastener

The holster should be appropriate for holding guns in use by the *State Police* and one additional magazine.
The holster should be equipped with tactical webbing for the attachment and plastic fasteners to prevent the gung from accidentally falling off.
The flap of the magazine pouch should be equipped with *Velcro* tapes, so that it can adjust to the size of the magazines in use by the *State Police.*

Warning! *All pouches should be large enough to accommodate the equipment and armaments in use by the employs of the State Police*

The closure of the pouches should be made with Velcro hook and loop tapes and with rivets.

UNIFORM HAT COVER



The hat cover should fulfill all the technical and quality parameters of high visibility clothing.
The components of the cover:

- Fluorescent fabric
- Reflective tape
- Transparent plastic window

The hat cover should be able to accommodate the suit's uniform hat worn by the employees of the *State Police*.
The cover should hold on to the hat with the help of an elastic tape stitched on the edge.
On the front of the cover there should be a transparent plastic window that permits the visibility of the badge. The window should measure 11 x 8 cm.
The cover should have two reflective tapes on the top measuring 5 cm wide. The tapes should be stitched vertically, at a distance of 9 cm from each other, front to back.

OVERSLEEVES

The oversleeves should fulfill all the technical and quality parameters of high visibility clothing.
The components of the oversleeves:

- Fluorescent fabric
- Reflective tape

The oversleeves should be tubular. They should be around 28 cm long and about 19 cm wide.
The oversleeves should hold on to the forearms with the help of elastic tapes stitched on both edges.
The oversleeve should have two reflective tapes measuring 5 cm wide. The reflective tapes should be stitched along the perimeter of the forearms.

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- Sewing threads should have the exact properties specified in the *Technical Specifications* document.
  - The stitch count of the seams should be 4 stitches per 1 cm.
  - The seam stitch should be straight, uniform, and symmetrical, and should not have any breaks or defects.
  - The stitch should be durable and not break when pulled apart with hands. The seam stitch should be able to resist a pulling force of over 12N.
  - All seam stitches should be reinforced at the extremities.
  - The seams at the hat cover and oversleeve should be welded via thermal fusion.
- All components of the product should be symmetrical.
- Prior to any production process, the manufacturer should conduct the dimensional stability test (the ability of the fabric to preserve its initial form once it has undergone the process of cutting, sewing, washing, etc.)
- Depending on the type, the fabric should not be washed or ironed at temperatures that exceed those specified by the manufacturer or those specified in this document.
- The fabric should have high resistance against UV radiation.
- The fabric should be highly durable and resistant against wear and tear.
- The fabric of the pouches, hat cover, oversleeve should have maximum waterproof and windproof rating and it should provide good ventilation.
- The allowed size error limit for the jacket is ±2%.
- The *Velcro* loop tapes should not show signs of raveling after frequent use.
- The materials used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The products should have one fabric label with the following information: name of manufacturer, year of production, size, gender, composition and maintenance instructions. The label of the vest should be stitched in the center of the collar together with the outlining tape. The label of the hat cover and oversleeves (only on the left) should be stitched on the inside.
The label should be folded. On one side should be the maintenance information while on the other side should the name of the manufacturer, year of production, name of the article and size.
Upon delivery, the product should be clean, folded and free of stains. Each product should be placed in its own polyethylene bag. The bags should be placed in cardboard boxes. Each box should contain an equal number of the same product.

The cardboard of the boxes (weighing around 600gr/m²) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on products size, gender, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

ANNEX – THE LIST OF TESTS RESULTS THAT SHOULD ACCOMPANY THE TECHNICAL OFFER AND THEIR RESPECTIVE TESTING METHODS.

Test	Testing method according to ISO* standard	
Composition %	ISO 1833: 2010	Textiles – Quantitative chemical analysis
Weave type	ISO 7211- 1: 1984	Textiles –Woven fabrics.
Weight gr/m²	ISO 3801:1977	Textiles –Woven fabrics - Determination of mass per unit length and mass per unit area
Water penetration	EN 20811:1992, ISO 811:1981	Textile fabrics – Determination of resistance to water penetration – Hydrostatic pressure test
Color fastness	ISO 105 -C06: 2010	Textiles – Tests for color fastness – Part D01: Color fastness to dry-cleaning using perchloroethylene solvent
	ISO 105- E01: 2013	Textiles – Tests for color fastness – Part E01: Color fastness to water
	ISO 105-E04 : 2013	Textiles – Tests for color fastness – Part E04: Color fastness to perspiration
	ISO 105 - X12: 2016	Textiles – Tests for color fastness – Part X12: Color fastness to rubbing
Light fastness (UV radiation)	ISO 105- B02: 2014	Textiles – Tests for color fastness – Part B02: Color fastness to artificial light: Xenon arc fading lamp test
Rub fastness	ISO 12947-2: 1998	Textiles – Determination of the abrasion resistance of fabrics by the Martindale method – Part 2: Determination of specimen breakdown
Pilling effect	ISO 12945-2: 2000	Textiles – Determination of fabric propensity to surface fuzzing and to pilling – Part 2: Modified Martindale method
Reflective materials	ISO 20471: 2013	High visibility clothing – Test methods and requirements

***Note!** The *State Police* will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Ceremonial gloves

1. MATERIALS

a. The base material that will be used for the production of the *ceremonial gloves* should be of the highest quality and with the following technical specifications:

Color	white	
Composition	100% *nylon simplex*	
Weave type	*Interlock / jersey double*	
Weight (± 5 %)	180-200 g/m²	
Color fastness	grade 4–5 (Gray Scale)	Dyeing should be done to the yarns.
Light fastness (UV radiation)	grade ≥ 6 (Blue scale)	The fabric should be highly resistance.
Rub fastness	over 15000 cycles	
Pill effect	grade 4 - 5	
Warning! *The weaving of the fabric should be elastic and the fabric should not be transparent.*		

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the fabric of the final product should be identical to the sample provided by the participant entity in the *technical bid*. It shall be subject to tests of wash, rub, chemical agent, sweat and light (UV radiation) fastness. The degree of the colorfastness of the fabric should be: *resistant - degree 4* and *very resistant - degree 5*. The degree of light fastness of the fabric should be: *no less than - grade 6: very good*.

The *quality control group* will not approve the use of fabrics and materials where the following defects may be present (the list is not exhaustive):

- organic based impurities,
- oil or ink stains,
- color shading,
- oxidations,
- wrinkles,
- absence or crossing of loops,
- slubs and nubs of yarns,
- surface holes,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

b. Auxiliary materials and accessories that shall be used for the construction of the item the *ceremonial gloves*:

Threads		
Threads for all stitches	Composition	100% polyester

	Metric number	80 Nm
	Pulling resistance	no less than 12N
	Color	same as fabric
Rivets		
Rivet for the cuffs. 	1 pcs d. 11 mm	
	Composition	100% polyvinil chloride (PVC)
Label		
Labels made with fabric for the identification of the manufacturer, size and maintenance instructions.	Composition	100% polyester
	Color	white

c. Objects that shall be used for the packaging of the article *ceremonial gloves:*

Plastic bag for the packaging of the gloves
Cardboard box for the storage of many gloves

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

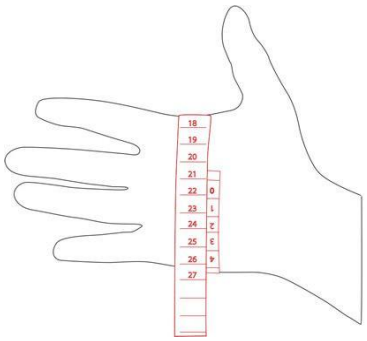
2. SIZES AND QUANTITY

The article *ceremonial gloves* will be ordered and manufactured in the sizes S–M–L for men and women and in the quantities that will result from the measurements that will be taken from the employees of the *State Police.*

Taking the measurements

The following measurements should be taken in order to determine the sizes for this article:

Women		
16 – 17.5 cm	18- 21 cm	21.5 – 23.5 cm
S	M	L
Men		
18.5 – 21 cm	21.5 -24 cm	24.5 – 28 cm
S	M	L



The perimeter of the hand should be measured in the widest width, when the hand is open.

The measurements must be taken on both hands and the largest hand will serve as the template.

3. REFERENCE COLOR

The color of the fabric and all of its components should be white.

The color set forth in this document should serve as a reference for the manufacturer. It will only be approved once the prototypes have been delivered.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

4. THE PROCESSING AND THE PREPARATION OF THE BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

Pattern-making

Pattern-making should be done by following the standard methodologies for garment construction. The component parts of the item/product must be compatible with each other and have clear visible lines of cutting and joining. All components must be positioned on the textile in the direction of the loops.

Relaxation of knitted fabrics

The knitted fabric should pass through the relaxation treatment for at least 24 hours before it is spread for cutting.

Cutting

During the process of cutting there should not be any shifting in the last sheets of the mattress. It's recommended that the mattress contain no more than 60 sheets. Special attention must be observed during the cutting of curved sides so that the edges are devoid of any serration.

Marking of the item's components

This process should guarantee that all the components of the product have the same color and tone without any visible shading.

5. CONSTRUCTION OF THE GLOVES

Technical instructions for the production of the ceremonial gloves.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.

Men's and women's ceremonial gloves are identical. They should be well tailored and have an orderly appearance when worn by the employees of the State Police.

The glove's components:

- bottom and top parts
- thumb
- parts between fingers
- plastic rivet

The gloves should be made with white *nylon simplex* and parts between fingers.

The gloves should have three decorative tucks on the top. They should start just under the base of the fingers and end a little above the wrist. The two outer ones should slope in a little towards the bottom.

The closure of the cuffs shoul be made with plastik rivets. The cuffs should have a 3 cm long vent on the inside of the wrist. The vent helps the closure of the cuffs with rivets. The edges of the cuffs should be folded on the inside abort 1 cmm.

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- Sewing threads should have the exact properties specified in the *Technical Specifications* document.
    - The stitch count of the seams should be 30 stitches per 5 cm.
    - The seam stitch should be straight, uniform, and symmetrical, and should not have any breaks or defects.
    - The stitch should be durable and not break when pulled apart with hands. The seam stitch should be able to resist a pulling force of over 12N.
    - All seam stitches should be reinforced at the extremities.
- All components of the product should be symmetrical.
- Prior to any production process, the manufacturer should conduct the dimensional stability test (the ability of the fabric to preserve its initial form once it has undergone the process of cutting, sewing, washing, ironing, etc.)
- Depending on the type, the fabric should not be washed or ironed at temperatures that exceed those specified by the manufacturer on the technical sheet or those specified in this document. Also, ironing should not leave any shiny patches on the fabric.
- The fabric should have high resistance against UV radiation.
- The fabric should be highly durable and resistant against wear and tear.
- The article should be manufactured in the sizes that will result from the body measurements of all employees of the *State Police*. The control group of the *State Police* will approve the results of the body measurement process.
- The allowed size error limit for the product is ±2%.
- The materials used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The gloves should be equipped with a fabric label with the following information: manufacturer's name, year of production, size, gender, composition and maintenance instructions.

The label should be stitched at the center of edge of the cuff. The label should be folded. On one side should be the maintenance instructions, on the other side should be the name of the manufacturer, the year of production, name of the article, size and gender.

Upon delivery, the gloves should be clean and free of stains.

The gloves should be covered in a thin paper, folded and put inside polyethylene bags. The bags should be placed inside a cardboard box. Each box should contain an equal number of gloves.

The cardboard of the boxes (weighing around 600gr/ m^2) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

ANNEX - The list of tests that must be accompany the technical offer of this article and standards on which these tests are based.

Tests	Testing methods according to ISO standards
Composition	ISO 1833: 2010 Textiles - quantitative chemical analysis
Weave type	ISO 7211- 1: 1984 Textiles - woven fabrics - construction
Weight	ISO 3801:1977 Textiles - Woven fabrics - Determination of mass per unit length and mass per unit area
Color fastness	ISO 105 -C06: 2010 Textiles - Tests for color fastness - Part C06: Color fastness to domestic and commercial laundering
	ISO 105- E01: 2013 Textiles - Tests for color fastness - Part E01: Color fastness to water
	ISO 105-E04 : 2013 Textiles - Tests for Color fastness - Part E04: Color fastness to perspiration
	ISO 105 - X12: 2016 Textiles - Tests for Color fastness - Part X12: Color fastness to rubbing
Light fastness (UV radiation)	ISO 105- B02: 2014 Textiles - Tests for Color fastness - Part B02: Color fastness to artificial light: Xenon arc fading lamp test
Rub fastness	ISO 12947-2: 1998 Textiles - Determination of the abrasion resistance of fabrics by the Martindale method
Pilling effect	ISO 12945-2: 2000 Textiles - Determination of fabric propensity to surface fuzzing and to pilling - Part 2: Modified Martindale method

*Note! The State Police will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Leather winter gloves

1. MATERIALS

a. The base material that will be used for the production of the *leather gloves* should be of the highest quality and with the following technical specifications:

Color	black, semi glossy
Composition	sheepskin
Surface	smooth, uniform
Thickness	over 0.7–0.8 mm
Weight	40 g/m²
Color resistance	4 - 5
Tanning	chrome
Humidity	16–18%
Ash	4–6%
Fat	3–5%
Presence of chrome oxidation	3.0%
Resistance to surface cracks	no less than 0.8/10 MPa
Durability until snap	no less than 0.9/10 MPa
Stretching from load	15–35%/10 MPa

The base material requirements for the sheepskin were based on the Albanian Standard (SSH) 1145: 1990, "Meshinat".

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the leather of the final product should be identical to the sample provided by the participant entity in the *technical bid*.

A simple rubbing fastness test will also be conducted on the sample provided in the *technical bid*. The colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the colored leather doesn't stain the white cloth.

The *quality control group* will not approve the use of materials where the following defects may be present (the list is not exhaustive):

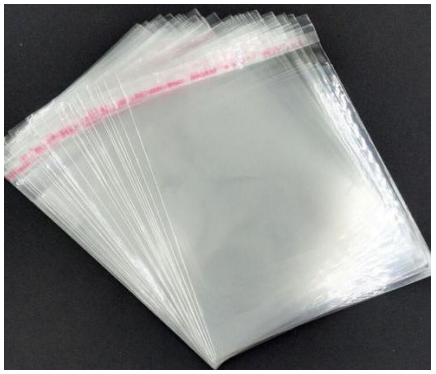
- cutting on the side of the flesh that does not exceed 1/3 of the thickness,
- scratches on the surface,
- damage from decay,
- surface cracks from leveling,
- surface cracks from four folds,
- vainness,
- non uniform dyeing,
- fat, chrome or extract stains,
- scars from flesh wounds,
- weak areas,

- fat wrinkles in the body and neck,
- indentation from leathering,
- ripples and holes,
- tick marks,
- wrinkles or folding in the trestle,
- gradation from leveling,
- attenuation from sawing,
- oxidations,
- porosity,
- and any other irregularities that may negatively affect the functionality and esthetics of the glove.

b. Auxiliary materials and accessories that shall be used for the construction of the article *leather gloves* should be of the highest quality*:*

Lining		
Lining for the gloves. 	Color	black
	Type	fluffy fabric
	Composition	100% polyester
Threads		
Threads for all stitches.	Composition	100% cotton
	Metric number	50 Nm
	Resistance to pulling force	not less than 12N
	Color	same as gloves
Threads for the decorative darts.	Composition	100% *pearl* cotton
	Metric number	30/3 Nm
	Resistance to pulling force	not less than 12N
	Color	same as gloves
Elastic tape		
Elastic tape for the cuffs. 	Composition	100% polyester
	Color	black
	Width	0.5 cm
Label		
Label made with fabric for the identification of the manufacturer, size, gender and maintenance instructions.	Composition	100% polyester
	Color	white

c. Objects that shall be used for the packaging of the article *leather gloves.*
Reference image.



Plastic bag for the packaging of a pair of gloves

Cardboard box for the packaging of many gloves.

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

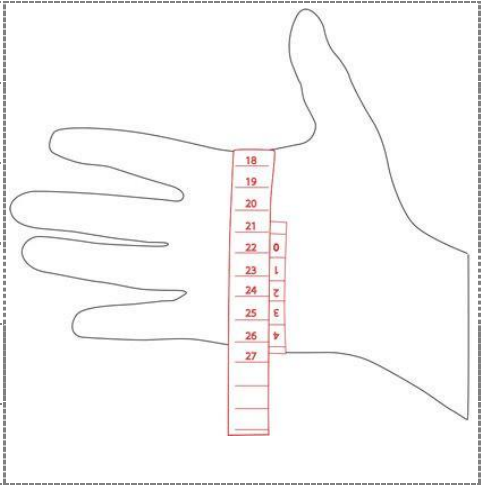
2. SIZES AND QUANTITY

The article *leather gloves* will be ordered and manufactured in the sizes S–M–L–XL for women and S–M–L–XL for men and in the quantities that will result from the measurements that will be taken from the employees of the *State Police*.

Taking the measurements

The following measurements should be taken in order to determine the sizes for this article:

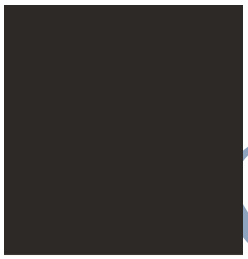
Women			
16–17.5 cm	18–20.5 cm	21–22 cm	22.5–23.5 cm
S	M	L	XL
Men			
18.5–21 cm	21.5–23 cm	23.5–25.5 cm	26–28 cm
S	M	L	XL



The perimeter of the hand should be measured in the widest width, when the hand is open. The measurements must be taken on both hands and the largest hand will serve as the template.

3. REFERENCE COLOR

The color of the gloves and all other elements should be black.
The texture of the metal parts should be grey, semi glossed.
The color set forth in this document should serve as a reference for the manufacturer. It will only be approved once the prototypes have been delivered.



Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

4. THE PROCESSING AND THE PREPARATION OF THE BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

Cutting
The cutting should be done in such way that most of the material may be used. The belt should consist of one single piece of leather. The edges should be uniform and smooth, especially in the curved areas. The belt should be cut in a way that it allows for maximum flexibility. The gloves of one pairs should be cut from the same piece of leather to avoid color shadings.

5. CONSTRUCTION OF THE GLOVES

Technical instructions for the production of the leather gloves.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.

Women's gloves

Men's gloves

Men's and women's leather gloves are identical in material and color, except for the pattern, which should be according to gender.

The components of the gloves:

- bottom and top parts
- thumb
- parts between fingers
- fluffy lining

The winter gloves should made with black leather with parts between fingers. The stitches should not be stretched or create wrinkles.

The gloves should have three decorative tucks on the top part stitched with *pearl* threads. They should start just under the base of the fingers and end a little above the wrist. The two outer ones should slope in a little towards the bottom.

The edge of the cuffs should be folded on the inside abort 5 mm and seamed with a single needle straight topstitch.

The gloves should be tightened at the cuffs with an elastic tape stitched on the inside.

The gloves should have a black fleeced lining.

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- The gloves should be well made and they should look orderly when worn by the employees of the *State Police*.
- The sheepskin should be considered of the highest quality only when the usable area is no less than 80% of the total surface when not dyed and 90% of the total area when it has been dyed.
- Defects are acceptable when they are present on up to 20% of the surface on the dyed leather. Defects are acceptable when they are present on up to 5 - 10% of the surface on the hide.
- The sheepskin should be:
  - soft,
  - full sturdy pulp,
  - well pressed and compact,
  - well laid throughout the surface,
  - uniform,
  - maximally resistant to stains, water and heat,
  - uniformly and consistently dyed throughout the surface.
- The leather should not become rough after getting wet and stitched.
- The leather should resist pulling and not break during stitching.
- Sewing threads should have the exact properties specified in the *Technical Specifications* document.
  - The stitch count of the seams should be 4 stitches per 1 cm.
  - The seam stitch should be straight, uniform, and symmetrical, and should not have any breaks or defects.

    - The stitch should be durable and not break when pulled apart with hands. The seam stitch should be able to resist a pulling force of over 12N.
    - All seam stitches should be reinforced at the extremities.
- All components of the product should be symmetrical.
- The gloves should be highly durable and resistant against wear and tear.
- The article should be manufactured in the sizes that will result from the body measurements of all employees of the *State Police*. The control group of the *State Police* will approve the results of the body measurement process.
- The allowed size error limit for the product is ±2%.
- The materials used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The gloves should be equipped with a fabric label with the following information: manufacturer's name, year of production, size, gender, composition and maintenance instructions.

The label should be stitched at the center of edge of the cuff. The label should be folded. On one side should be the maintenance instructions, on the other side should be the name of the manufacturer, the year of production, name of the article, size and gender.

Upon delivery, the gloves should be clean and free of stains.

The gloves should be covered in thin paper, folded and put in pairs inside polyethylene bags. The bags should be placed inside a cardboard box. Each box should contain an equal number of gloves of the same gender.

The cardboard of the boxes (weighing around 600gr/ m²) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

The list of tests that must be accompany the technical offer of this article and standards on which these tests are based.

Tests	Testing methods according to ISO standards
Composition	ISO 17131:2012 Leather - Identification of leather with microscopy
Thickness	ISO 2589:2016 Leather - Physical and mechanical tests - Determination of thickness
Mass per unit area	ISO 2420: 2017 Leather - Physical and mechanical tests - Determination of apparent density and mass per unit area
Tanning	ISO/DIS 15115 Leather — Definitions
Humidity	UNI 10741:1999 Leather - Method for determining humidity.
Ash	ISO 4047:1977 Leather - Determination of sulphated total ash and sulphated water-insoluble ash
Fat	ISO 4048: 2008

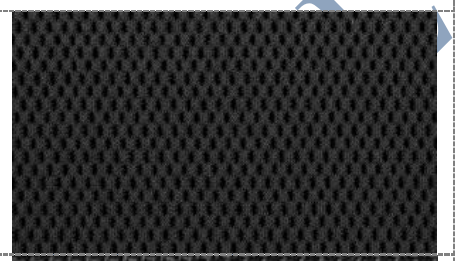
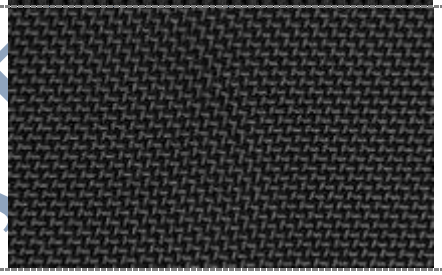
	Leather -Chemical tests - Determination of matter soluble in dichloromethane and free fatty acid content
Chromic oxide content	ISO 5398-1:2007 Leather - Chemical determination of chromic oxide content - Part 1: Quantification by titration
Leather dye resistance	ISO 15700:1998 Leather - Tests for Color fastness - Color fastness to water spotting
	ISO 11640: 2013 Leather - Tests for Color fastness - Color fastness to cycles of to-and-fro rubbing
	ISO 11641: 2012 Leather - Tests for Color fastness -- Color fastness to perspiration
	ISO 11642: 2012 Leather - Tests for Color fastness - Color fastness to water
	ISO 11643: 2009 Leather - Tests for Color fastness - Color fastness of small samples to solvents
Stretching until snap	ISO 3376:2011 Leather - Physical and mechanical tests - Determination of tensile strength and percentage extension
Stretching from load	
Durability until snap	
Resistance to surface cracks	ISO 3378:2002 Leather - Physical and mechanical tests -Determination of resistance to grain cracking and grain crack index

*Note! The State Police will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Tactical vest

1. MATERIALS

a. The base material that will be used for the production of the *tactical vest* should be of the highest quality, appropriate for tactical clothing and with the following technical specifications:

Color	Black	
Composition	100% nylon	
Weave type 1	knitted mesh	
Weave type 2	Twill	
Color fastness	Grade 4–5 (Gray Scale)	Dyeing should be done to the yarns.
Light color fastness (UV radiation)	grade ≥ 6 (Blue Scale)	The fabric should be highly resistant.
Rub color fastness	over 25,000 cycles	
Pilling effect	nota 5	

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the fabric of the final product should be identical to the sample provided by the participant entity in the *technical bid*. It shall be subject to tests of wash, rub, chemical agent, sweat and light (UV radiation) fastness. The degree of the colorfastness of the fabric should be: *resistant - degree 4* and *very resistant - degree 5*. The degree of light fastness of the fabric should be: *no less than - grade 6: very good.*

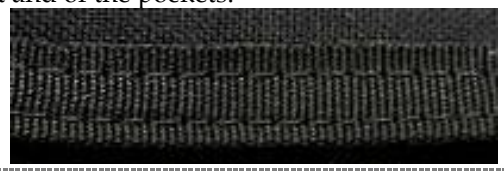
A simple rubbing fastness test will also be conducted on the sample provided in the *technical bid*. The colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the color doesn't stain the white cloth.

The *quality control group* will not approve the use of fabrics and materials where the following defects may be present (the list is not exhaustive):

- *Velcro* loop tapes that ravel quickly,
- organic based impurities,
- oil or ink stains,
- color shading,
- oxidations,

- wrinkles,
- absence of warp and weft threads,
- slubs and nubs of warps and wefts,
- surface holes,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

b. Auxiliary materials and accessories that shall be used for the construction of the item the *tactical vest* should be appropriate for tactical clothing:

Piping		
Piping tape for the outlining of the edges of the vest and of the pockets. 	Color	black
	Width	2 cm (1cm stitched)

Velcro			
Velcro fasteners for the pockets and other elements in the vest. 	Composition		100% polyamide fibers
	Thickness when fastened		± 3 mm
	Weight		41 g/m ± 5%
	Color		same as vest
	Thickness loop tape		2.2 mm
	Thickness hook tape		1.6 mm
	Resistance to extreme temperatures		
	Cold		- 30° C
	Hot	weakening point	180° C
		melting point	210—250° C
	Color fastness		
	Wash fastness		no less than 3
	Hot water fastness		
	Sweat fastness		
	Rub fastness		

Rivets		
	d. 15 mm	
	Composition	brass (zink and copper alloy)
	Color	black without gloss

Webbings		
	Composition	100% nylon
	Thickness	2.5 cm
	Color	black
Zippers		
Zipper for the closing of the vest. 	Type	standard, open-end
	Teeth size	8 VS or 10VF
	Fabric composition	100% polyester
	Teeth composition	100% acetal
	Color	black
Zipper for the inside pockets. 	Type	standard, open-end
	Teeth size	4 CF or 5 CF
	Fabric composition	100% polyester
	Teeth composition	monofilament 100% polyester
	Color	black
Other accessories		
Rings for the draining of the pockets. 	One for each pocket	
	Composition	100 % polyester
	Color	black
Plastic slides for the side tension straps 	Composition	100% acetal
	Color	black

"D" type rings 	Composition	stainless steel
	Color	black
Elastic tape for the pockets 	Composition	100% polyester
	Color	black
	Width	4 cm
Plastic buckles: For the pistol sheath  For the belt 	Composition	100% acetal
	Color	black

Threads

Threads for all stitches	Composition	100% nylon
	Metric number	75 Nm
	Pull resistance	no less than 12N.
	Color	black

Fabric

Rubber fabric for the shooting pad	Color	black
	Composition	100% polyvinyl chloride PVC

Labels

Labels made with fabric for the identification of the manufacturer, jacket size and maintenance instructions.	Composition	100% polyester
	Color	white

c. Stamps on the article *tactical vest:*

Stamping		
	Front stamp dimensions	12 x 2.2 cm
	Back stamp dimensions	22 x 4.3 cm
	Color	white
	Font type	*Myriad Pro Bold*

d. Objects that shall be used for the packaging of the article *tactical vest:*
Reference image


Plastic bag for the packaging of one vest
Cardboard box for the packaging of 30 vests

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

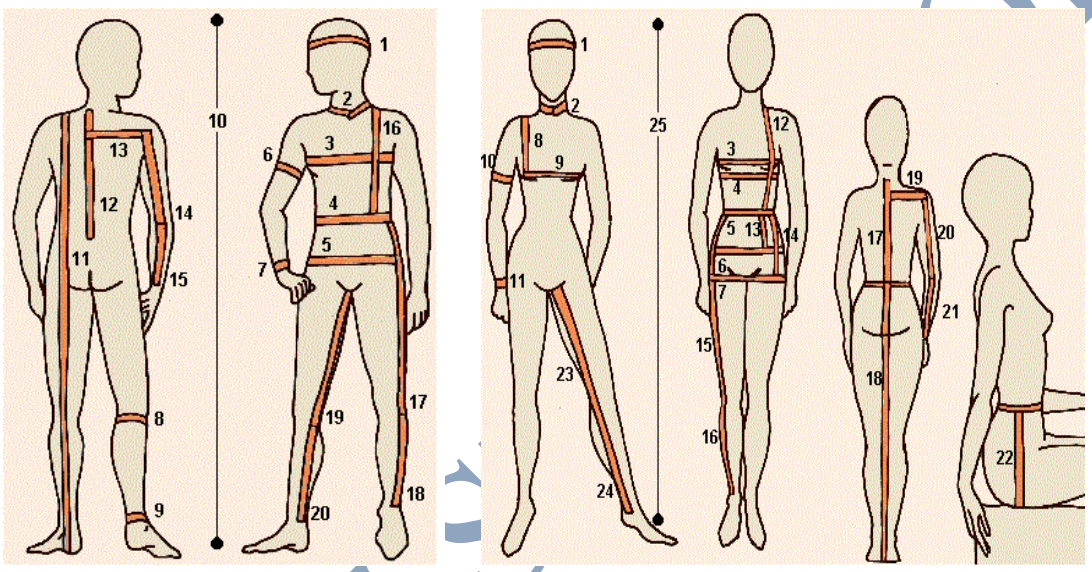
2. SIZES AND QUANTITY

The article *tactical vest* will be ordered and manufactured in three standard sizes and in the quantities that will result from the measurements that will be taken from the employees of the *State Police*.

Size I	Size II	Size III
XS - L	XL - XXL	XXXL +

Taking the measurements

The following measurements should be taken in order to determine the sizes for this article:



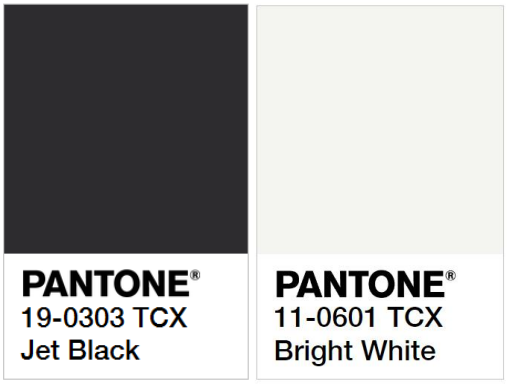
Men			Women		
2	Around collar	cm.	2	Around collar	cm.
3	Chest	cm.	3	Bust	cm.
4	Waist	cm.	4	Under bust	cm.
5	Hip	cm.	5	Waist	cm.
6	Around arm	cm.	6	Abdomen	cm.
10	Full height	cm.	7	Hips	cm.
12	Back length	cm.	8	Bust height	cm.
13	Top shoulder length	cm.	12	Waist height	cm.
16	Natural waist length (shoulder to waist)	cm.	13	Abdomen height	cm.
	Full height	cm.	17	Back length	cm.
			19	Top shoulder length	cm.
			25	Full height	cm.

3. REFERENCE COLORS

The color of all the fabrics and all of its accessories should be black.

The color of the stamps should be white.

The colors set forth in this document should serve as a reference for the manufacturer. They will only be approved once the prototypes have been delivered.



Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

4. THE PROCESSING AND PREPARATION OF BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

Pattern-making

Pattern-making should be done by following the standard methodologies for garment construction. The component parts of the item/ product must be compatible with each other and have clear visible lines of cutting and joining. All components must be positioned on the textile in the direction of the warp.

Cutting

During the process of cutting there should not be any shifting in the last sheets of the mattress. It's recommended that the mattress contain no more than 60 sheets. Special attention must be observed during the cutting of curved sides so that the edges are devoid of any serration.

Marking of the item's components

This process should guarantee that all the components of the product have the same color and tone without any visible shading.

5. CONSTRUCTION OF THE VEST

Technical instructions for the production of the tactical vest.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.

The vest should be a general purpose tactical vest for use by in-duty officers of the *State Police*.

Each part of the vest should be black color.

Warning! *The vest and all its accessories should be of the highest quality and appropriate for heavy duty use by police officers. The vest should not be confused with lower quality tactical vests made for recreational activities like "air soft" and "paintball", which have the same appearance and configuration.*

Components of the tactical vest:

- Mesh frame (there pieces)
- One pouch for the radio
- Three pouches for hand gun magazines and other tools
- One multifunctional wide pouch
- Attachable shot shell cartridge holder
- Two front pouches for assault rifle magazines
- Two attachable pouches for assault rifle magazines
- One attachable cross-draw holster equipped with a magazine pouch
- Two side pouches for assault rifle magazine and other tools: flashlight, pepper spray, baton, etc.
- Tactical belt with pouches
- Webbing straps

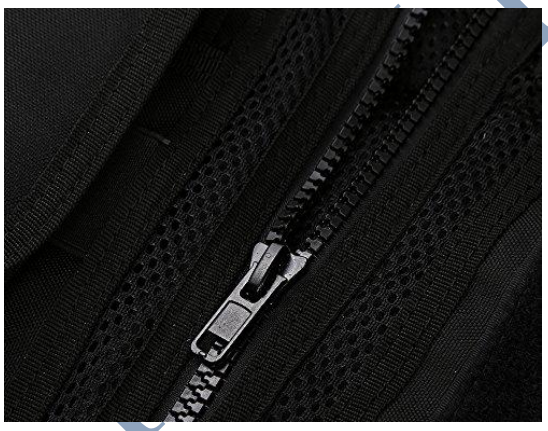
MESH FRAME

The frame should be made with highly durable heavy duty nylon mesh. The front panels of the frame should be detached from the back panel. The front and back panels should be connected with each other with fasteners at the shoulders and at the flanks.

The edges of the frame should be piped with nylon tape.

The fasteners. The vest should be equipped with two *Velcro* straps on the shoulders and three webbing straps on each flank for size adjustment.

The shooting pad. The whole area of the collar bone should be padded and covered with rubber or any other non-slippery material that is resistant to rubbing. The padding acts as support when shooting the assault rifle.



The zipper. The vest should have a high quality plastic zipper closure measuring 36 cm in length. The zipper should be able to closed fully and be equipped with an anti-slide zipper lock.

The rescue handle. The vest should be equipped with a rescue handle positioned between the shoulders. In case of danger, the person wearing the vest can be dragged away from the danger zone if injured or knocked unconscious.

Both the handle and the stitch should be extra strong and durable.

Inner pockets. The vest should be equipped with two front inner pockets with zipper closures, in the abdomen area, for the storage of maps, papers, etc.

Other accessories. The vest should be equipped with all necessary accessories for the attachment of various equipment: metal D-rings on the shoulders, loops for fastening the tactical belt, *Velcro* loop tapes on the back for the fastening of additional pouches or the word POLICIA and the All-purpose Lightweight Individual Carrying Equipment (ALICE) system for the fastening of the hydration system and additional equipment.

WALKIE TALKIE POUCH

The pouch should be positioned on the left collar bone (when worn). The size of the pouch should be appropriate for the radio equipment in use by the *State Police*.

The pouch should have a *Velcro* closure. It should also have a small hole at the bottom for water drainage.

TRIPLE SMALL POUCHES

The vest should be equipped with a triple small pouch with *Velcro* closure appropriate for carrying side arm magazines and other thin equipment such as tactical knifes, pepper spray, small flashlight, etc.

The size of the pouches should be appropriate for the side arm magazines in use by the *State Police*.

The pouch should have small holes at the bottom for water drainage.

MULTI PURPOSE POUCH

The multipurpose pouch should be positioned on the right side of the chest. The pouch should be wide, rectangular with *Velcro* flap, appropriate for carrying various objects such as cuffs, self phone, etc.

On top of the flap there should be a Velcro loop tape appropriate for the fastening of a shot shell cartridge holder or the word POLICIA.

LARGE FRONT POUCHES

The vest should be equipped with four large pouches measuring 9 x 19.5 x 8.5 cm each (width x height x depth) appropriate for carrying type AR70/90, M16, M4, AK47 assault rifle magazines.

A large double pouch should be positioned on the right side of the abdomen while the other two single pouches should be positioned on the flanks.

The pouches should be large enough to accommodate magazines belonging to assault rifles in use by the *State Police*.

The pouches should have *Velcro* closures and be secured with elastic tape to keep the magazines and other objects from moving freely in the pouch.

The pouch should have small holes at the bottom for water drainage.

ATTACHABLE POUCHES

The vest should come with an additional attachable large double pouch that could be fastened on the left side of the abdomen, instead of the cross draw handgun holster.

The attachable double pouch should have the same characteristics as the other large pouches.

VELCRO LOOP TAPES

The vest should have a large *Velcro* loop tape on the left side of the abdomen. This area serves as platform, either for the fastening of the cross draw holster or the attachable large double pouch.

The fastening of the cross draw holster should also be done with additional webbings and plastic buckles stitched both at the vest and on the holster.

CROSS DRAW HOLSTER

The cross draw holster should be of standard shape, appropriate for use with the tactical vest. It should be equipped with an additional small magazine pouch, *Velcro* loop tape, plastic buckles and webbings that will keep it fastened to the vest.

TACTICAL BELT

The vest should come with a removable tactical belt. The belt should be hold in place with the help of five belt loops attached to bottom edge of the vest.

The belt should be made with nylon while the belt buckle should be made with plastic material of the highest quality.

WORD “POLICIA” IN THE FRONT AND BACK

The vest should have two designated areas with *Velcro* loop tapes for the placement of the word POLICIA, on the flap of the multipurpose wide chest pouch and on the back.

The word POLICIA should stamped on rectangular pieces of nylon fabric (same as the pouches). The rectangular pieces should have same size as the loop tapes where they will be fastened.

The dimensions of the letter should be exactly as specified in the technical illustration. The word POLICIA should not be stretched in either direction. The writing should strictly follow the proportions specified by the font. The letters should be all caps while the font should be *Myriad Pro Bold*.

The stamp should be of the highest quality and should not suffer any surface cracks or other damages when used for prolonged periods of time.

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- Sewing threads should have the exact properties specified in the *Technical Specifications* document.
    - The stitch count of the seams should be 4 stitches per 1 cm.
    - The seam stitch should be straight, uniform, and symmetrical, and should not have any breaks or defects.
    - The stitch should be durable and not break when pulled apart with hands.
    - The seam stitch should be able to resist a pulling force of over 12N.
    - All seam stitches should be reinforced at the extremities.
- All components of the product should be symmetrical.
- Prior to any production process, the manufacturer should conduct the dimensional stability test (the ability of the fabric to preserve its initial form once it has undergone the process of cutting, sewing, washing, etc.)
- The product should have high resistance against UV radiation.
- The product should be highly durable and resistant against wear and tear.
    - Load until tear lengthwise–840 KG/PA
    - Load until tear widthwise–700 kG/PA
    - Stretchiness from pull, both lengthwise and widthwise–140%
    - Temperature of use -80°/+100° C
- The article should be manufactured in the sizes that will result from the body measurements of all employees of the *State Police*. The control group of the *State Police* will approve the results of the body measurement process.
- The allowed size error limit for the product is ±2%.

- The *Velcro* loop tapes should not show signs of raveling after frequent use.
- The materials and accessories used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The vest should be equipped with a fabric label with the following information: manufacturer's name, year of production, size, composition and maintenance instructions. The label should be stitched at the center of the collar tape's stitch. The label should be folded. On one side should be the maintenance information while on the other side should the name of the manufacturer, year of production, name of the article and size.

Upon delivery, the products should be clean, folded and free of stains. They should placed inside polyethylene bag. The bags should be placed in cardboard boxes. Each box should have an equal number of products.

The cardboard of the boxes (weighing around 600gr/ m^2) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

ANNEX - The list of tests that must be accompany the technical offer of this article and standards on which these tests are based.

Tests	Testing methods according to ISO standards
Composition	ISO 1833: 2010 Textiles - quantitative chemical analysis
Weave type	ISO 7211- 1: 1984 Textiles - woven fabrics - construction
	ISO 8388: 1998 Textiles - Knitted fabrics - Types
Weight	ISO 3801:1977 Textiles - Woven fabrics - Determination of mass per unit length and mass per unit area
Waterproof rating	EN 20811:1992, ISO 811:1981 Textile fabrics - determination of resistance to water penetration
Color fastness	ISO 105 -C06: 2010 Textiles - Tests for Color fastness - Part C06: Color fastness to domestic and commercial laundering
	ISO 105- E01: 2013 Textiles - Tests for Color fastness - Part E01: Color fastness to water
	ISO 105-E04 : 2013 Textiles - Tests for Color fastness - Part E04: Color fastness to perspiration
	ISO 105 - X12: 2016 Textiles - Tests for Color fastness - Part X12: Color fastness to rubbing
Light fastness (UV radiation)	ISO 105- B02: 2014 Textiles - Tests for Color fastness - Part B02: Color fastness to artificial light: Xenon arc fading lamp test

Rub fastness	ISO 12947-2: 1998 Textiles - Determination of the abrasion resistance of fabrics by the Martindale method
Pilling effect	ISO 12945-2: 2000 Textiles - Determination of fabric propensity to surface fuzzing and to pilling - Part 2: Modified Martindale method

*Note! The State Police will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Life vest

1. MATERIALS

a. The fabric that will be used for the production of the *life vest* should be of the highest quality and with the following technical specifications:

Color	dark blue and black	
Composition	100% nylon	
Weave type	Oxford	
Yarn linear mass	200D	
Waterproof	over 20,000 mm	
Colorfastness	grade 4—5 (Gray Scale)	Dyeing should be applied to the yarns.
Light color fastness (UV radiation)	Grade ≥ 6 (Blue scale)	The fabric should be highly resistant.
Rub color fastness	over 15000 cycles	
Pill effect	grade 5	

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the fabric of the final product should be identical to the sample provided by the participant entity in the *technical bid*. It shall be subject to tests of wash, rub, chemical agent, sweat and light (UV radiation) fastness. The degree of the colorfastness of the fabric should be: *resistant - degree 4* and *very resistant - degree 5*. The degree of light fastness of the fabric should be: *no less than - grade 6: very good.*

A simple rubbing fastness test will also be conducted on the sample provided in the *technical bid*. The colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the color doesn't stain the white cloth.

The *quality control group* will not approve the use of fabrics and materials where the following defects may be present (the list is not exhaustive):

- organic based impurities,
- oil or ink stains,
- color shading,
- oxidations,
- wrinkles,
- absence of warp and weft threads,
- slubs and nubs of warps and wefts,
- surface holes,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

b. Auxiliary materials and accessories that shall be used for the construction of the article *life vest*.

Accessories		
Plastic buckle. 	Quantity	3 pc
	Composition	100 % PVC
	Color	grey
Webbing. 	Width	3.5–4 cm
	Composition	100% nylon
	Color	black

Floating material		
	Composition	100% expanded polyethylene *
	Buoyancy	≥ 7.5 kg
	Buoyancy degradation	≤ 5% (within 24 hrs)
	Buoyancy (floating force)	over 150 N
	*(EPE) according to the norms UNI EN 395: 1994	

Threads		
Threads for all stitches.	Composition	100% *nylon*
	Metric number	80 Nm
	Pull resistance	not less than 12N
	Color	same as vest

Labels		
Labels made with fabric for the identification of the manufacturer, size and maintenance instructions.	Composition	100% polyester
	Color	white

c. Stamps on the *life vest*:

Stamping		
Word POLICIA, front and back.  	Front stamp dimensions	11 x 2.2 cm
	Back stamp dimensions	32 x 10.5 cm
	Font type	*Myriad Pro Bold*
	Color	white

d. Objects that shall be used for the packaging of the article *life vest:*

The following image serves only as a reference

Plastic bag for the packaging of the vest

Cardboard box for the storage of many vests

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

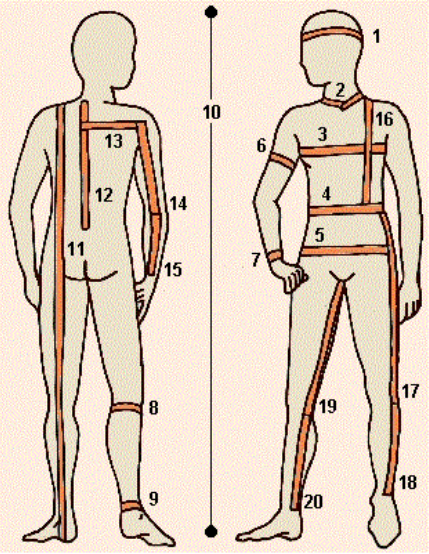
2. SIZES AND QUANTITY

The article *life vest* will be ordered and manufactured in the sizes and quantities that will result from the measurements that will be taken from the employees of the *State Police*.
The size should be determined according to body weight and chest perimeter.

Size	**S**	**M**	**L**	**XL**	**XXL**
Weight kg	40–50	50–70	70–80	80–90	90+
Around chest	80–90	90–100	100–110	110–120	120–130

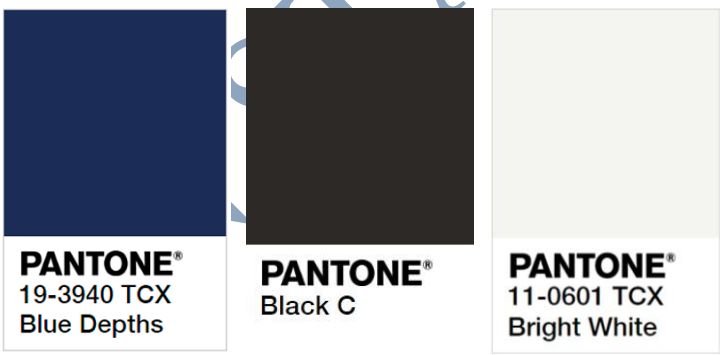
Taking the measurements

The following measurements should be taken into account for the pattern grading and sizing for this article.



3	Chest	cm.
4	Waist	cm.
5	Hip	cm.
10	Full height	cm.
12	Back length	cm.
13	Half across back	cm.
16	Natural waist length (shoulder to waist)	cm.
	Top shoulder length	cm.
	Weight	kg.

3. REFERENCE COLORS



The outer fabric of the vest should be dark blue.

The inner fabric of the vest should be black.

The words POLICIA should be white.

The color set forth in this document should serve as a reference for the manufacturer. It will only be approved once the prototypes have been delivered.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

4. THE PROCESSING AND THE PREPARATION OF THE BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

Pattern-making

Pattern-making should be done by following the standard methodologies for garment construction. The component parts of the product must be compatible with each other and have clear visible lines of cutting and joining. All components must be positioned on the textile in the direction of the warp.

Cutting

During the process of cutting there should not be any shifting in the last sheets of the mattress. It's recommended that the mattress contain no more than 100 sheets. Special attention must be observed during the cutting of curved sides so that the edges are devoid of any serration.

Marking of the item's components

This process should guarantee that all the components of the product have the same color and tone without any visible shading.

5. CONSTRUCTION OF THE VEST

Technical instructions for the production of the life vest.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.

The life vest should be of the Type III universal flotation aid for near shore calm waters. The vest will be used by the *State Police* employee on duty in ships and motor boats.

The vest's components:

- Waterproof fabric
- Floating foam
- Webbings

The vest should be made with dark blue fabric on the outside and black fabric on the inside. The fabric should be made of durable waterproof nylon.

The vest should be filled with floating foam made of polyethylene fibers.

The closure of the vest should be done with very strong and durable webbings with plastic buckles that go around the vest. On the flanks, the vest parts should be detached from each-other.

The webbings should go through nylon webbing loops for increased durability and security.

WORD "POLICIA", FRONT AND BACK

The word POLICIA should be stamped on the front and back of the life vest. The front stamp should be positioned in the right chest area. The back stamp should be positioned between the shoulders.

The dimensions of the letter should be exactly as specified in the technical illustration. The word POLICIA should not be stretched in either direction. The writing should strictly follow the proportions specified by the font. The letters should be all caps while the font should be *Myriad Pro Bold*.

The stamp should be of the highest quality and should not suffer any surface cracks or other damages from prolonged use.

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- The vest should meet the UNI EN ISO 12402-3 standard.
- All the materials used for the vest should have maximum flammability resistance.
- The vest should have buoyancy (floating force) of over 150N.
- Sewing threads should have the exact properties specified in the *Technical Specifications* document.

- The stitch count of the seams should be 7 stitches per 1 cm.
- The seam stitch should be straight, uniform, and symmetrical, and should not have any breaks or defects.
- The stitch should be durable and not break when pulled apart with hands. The seam stitch should be able to resist a pulling force of over 12N.
- All seam stitches should be reinforced at the extremities.

– All components of the product should be symmetrical.
– Prior to any production process, the manufacturer should conduct the dimensional stability test (the ability of the fabric to preserve its initial form once it has undergone the process of cutting, sewing, washing, ironing, etc.)
– The fabric should have high resistance against UV radiation.
– The fabric should have hydrophobic properties.
– The fabric should be highly durable and resistant against wear and tear.
– Fabrics, materials and accessories used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
– The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The vest should be equipped with a fabric label with the following information: manufacturer's name, year of production, size, composition and maintenance instructions.

The label should be stitched inside the vest, in the lower right side. The label should be folded. On one side should be the maintenance instruction on the other side should be the name of the manufacturer, the year of production, name of the article and size/weight.

Each vest should also be accompanied by an instructions booklet with technical and usage information.

Upon delivery, the vest should be clean, and free of stains.

The folded vest should be placed in a polyethylene bag. The packaging boxes should contain products of the same size with collars of the same size. Each box should contain an equal number of products.

The cardboard of the boxes (weighing around 600gr/ m^2) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

The list of tests that must be accompany the technical offer of this article and standards on which these tests are based.

Tests	Testing methods according to ISO standards
The vest must meet the international standard UNI EN ISO 12402-3	
Composition	ISO 1833: 2010 Textiles - quantitative chemical analysis
Weave type	ISO 7211- 1: 1984 Textiles - woven fabrics - construction
Weight	ISO 3801:1977 Textiles - Woven fabrics - Determination of mass per unit length and mass per unit area
Metric number	ISO 7211-5: 1984 /UNI 9275 Textiles - Woven fabrics - Construction - Methods of analysis - Part 5: Determination of linear density of yarn

	removed from fabric
Waterproof rating	EN 20811:1992, ISO 811:1981 Textile fabrics - determination of resistance to water penetration
Color fastness	ISO 105 -C06: 2010 Textiles - Tests for Color fastness - Part C06: Color fastness to domestic and commercial laundering
	ISO 105- E01: 2013 Textiles - Tests for Color fastness - Part E01: Color fastness to water
	ISO 105-E04 : 2013 Textiles - Tests for Color fastness - Part E04: Color fastness to perspiration
	ISO 105 - X12: 2016 Textiles - Tests for Color fastness - Part X12: Color fastness to rubbing
Light fastness (UV radiation)	ISO 105- B02: 2014 Textiles - Tests for Color fastness - Part B02: Color fastness to artificial light: Xenon arc fading lamp test
Rub fastness	ISO 12947-2: 1998 Textiles - Determination of the abrasion resistance of fabrics by the Martindale method
Pilling effect	ISO 12945-2: 2000 Textiles - Determination of fabric propensity to surface fuzzing and to pilling - Part 2: Modified Martindale method
Floating material	According to the norms UNI EN 395: 1994

*Note! The State Police will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Operational bib

1. MATERIALET

a. The base material that will be used for the production of the *operational bib* should be of the highest quality and with the following technical specifications:

Color	dark blue (evening blue)			
Composition ± 5%	65% polyester		35% cotton	
Weave type	twill (gabardine)			
Weight ± 5%	210 g/m²			
Density	warp	37/10mm	weft	24/10 mm
Metric number	warp	20/1 Nm	weft	0/1 Nm
Pulling resistance	warp	1200 N	weft	700 N
Color fastness	grade 4–5 (Gray Scale)	Dyeing should be done to the yarns.		
Light fastness (UV radiation)	grade ≥ 6 (Blue Scale)	The fabric should be highly resistant.		
Rub fastness	over 10,000 cycles			
Pilling effect	grade 4–5			

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the fabric of the final product should be identical to the sample provided by the participant entity in the *technical bid*. It shall be subject to tests of wash, rub, chemical agent, sweat and light (UV radiation) fastness. The degree of the colorfastness of the fabric should be: *resistant - degree 4* and *very resistant - degree 5*. The degree of light fastness of the fabric should be: *no less than - grade 6: very good.*

A simple rubbing fastness test will also be conducted on the sample provided in the *technical bid*. The colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the color doesn't stain the white cloth.

The *quality control group* will not approve the use of fabrics and materials where the following defects may be present (the list is not exhaustive):

- *Velcro* loop tapes that ravel quickly,
- organic based impurities,
- oil or ink stains,
- color shading,
- oxidations,
- wrinkles,

- absence of warp and weft threads,
- slubs and nubs of warps and wefts,
- surface holes,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

b. Auxiliary materials and accessories that shall be used for the construction of the item *operational bib*:

<table>
<tr><th colspan="4">Tape</th></tr>
<tr><td rowspan="3">Biased cut tape for the outlining of the bib.</td><td colspan="2">Composition</td><td>100% polyester</td></tr>
<tr><td colspan="2">Color</td><td>same as fabric</td></tr>
<tr><td colspan="2">Width</td><td>1 cm (sewed 0.5 cm)</td></tr>
<tr><th colspan="4">Velcro</th></tr>
<tr><td rowspan="8">*Velcro* loop tape for the fastening of the bib.
  </td><td colspan="2">Composition</td><td>100% polyamide fibers</td></tr>
<tr><td colspan="2">Thickness</td><td>2.2 mm</td></tr>
<tr><td colspan="2">Linear mass</td><td>41 g/m ± 5%</td></tr>
<tr><td colspan="2">Color</td><td>same as fabric</td></tr>
<tr><td colspan="3">Resistance to extreme temperatures</td></tr>
<tr><td colspan="2">Cold</td><td>- 30° C</td></tr>
<tr><td rowspan="2">Hot</td><td>weakening point</td><td>180° C</td></tr>
<tr><td>melting point</td><td>210—250° C</td></tr>
<tr><td colspan="3">Color fastness</td></tr>
<tr><td colspan="2">Wash fastness</td><td rowspan="4">not less than 3</td></tr>
<tr><td colspan="2">Hot water fastness</td></tr>
<tr><td colspan="2">Sweat fastness</td></tr>
<tr><td colspan="2">Rub fastness</td></tr>
<tr><th colspan="4">Elastic tape</th></tr>
<tr><td rowspan="2">Elastic tape for tightening the bib.
  </td><td>Width</td><td colspan="2">2.5 cm</td></tr>
<tr><td>Color</td><td colspan="2">black</td></tr>
<tr><th colspan="4">Threads</th></tr>
<tr><td rowspan="4">Threads for all stitches.</td><td>Composition</td><td colspan="2">100% polyester</td></tr>
<tr><td>Metric number</td><td colspan="2">80 Nm</td></tr>
<tr><td>Pulling resistance</td><td colspan="2">no less than 12 N</td></tr>
<tr><td>Color</td><td colspan="2">same as bib</td></tr>
</table>

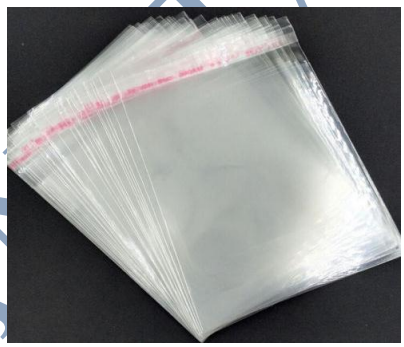
Label		
Label made with fabric for the identification of the manufacturer, size, composition and maintenance instructions.	Composition	100% polyester
	Color	white

c. Stamps for the article *operational bib:*

Stamps		
Word POLICIA, front and back  	Front stamp dimensions	11 x 2.2 cm
	Back stamp dimensions	32 x 10.5 cm
	Font type	*Myriad Pro Bold*
	Color	white

d. Objects that shall be used for the packaging of the article *operational bib.*

The following image serves only as a reference



Plastic bag for the packaging of the bib
Cardboard box for the storage of many bibs

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

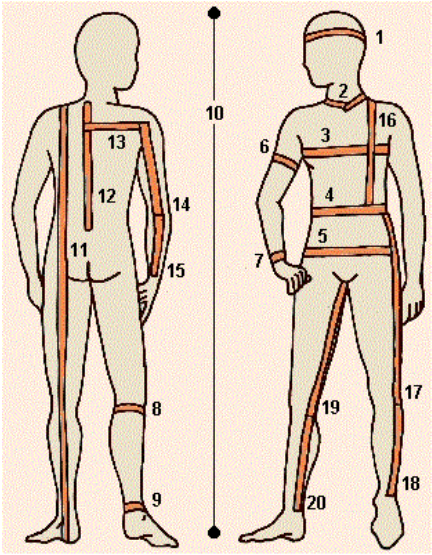
2. SIZES AND QUANTITY

The article *operational bib* will be ordered and manufactured in two standard sizes and in the quantities that will result from the measurements that will be taken from the employees of the *State Police*.

Size I	Size II
XS - S – M - L	XL - XXL - 4XL

Taking the measurements

The following measurements should be taken in order to determine the sizes for this article:



3	Chest	cm.
4	Waist	cm.
5	Hip	cm.
10	Full height	cm.
12	Back length	cm.
13	Half across back	cm.
16	Natural waist length (shoulder to waist)	cm.
	Top shoulder length	cm.

3. REFERENCE COLOR

The color for the base fabric of the bib should be dark blue.

The color set forth in this document should serve as a reference for the manufacturer. It will only be approved once the prototypes have been delivered.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

4. THE PROCESSING AND PREPARATION OF BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

Pattern-making

Pattern-making should be done by following the standard methodologies for garment construction. The component parts of the item/ product must be compatible with each other and have clear visible lines of cutting and joining. All components must be positioned on the textile in the direction of the warp.

Cutting

During the process of cutting there should not be any shifting in the last sheets of the mattress. It's recommended that the mattress contain no more than 100 sheets. Special attention must be observed during the cutting of curved sides so that the edges are devoid of any serration.

Marking of the item's components

This process should guarantee that all the components of the product have the same color and tone without any visible shading.

5. CONSTRUCTION OF THE BIB

Technical instructions for the production of the operational bib.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.

The front and back parts of the bib should be joined only at the shoulders.

The bib should be outline with a blue colored tape measuring about 5 mm wide.

The bib should be equipped with two *Velcro* fasteners on the flanks for the tightening of the bib.

The bottom corners of the bib should be rounded.

The bib should have the word POLICIA stamped on the front and on the back.

WORD "POLICIA", FRONT AND BACK

The word POLICIA should be stamped on the front and back of the life vest. The front stamp should be positioned in the right chest area. The back stamp should be positioned between the shoulders.

The dimensions of the letter should be exactly as specified in the technical illustration. The word POLICIA should not be stretched in either direction. The writing should strictly follow the proportions specified by the font. The letters should be all caps while the font should be *Myriad Pro Bold.*

The stamp should be of the highest quality and should not suffer any surface cracks or other damages from prolonged use.

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- Sewing threads should have the exact properties specified in the *Technical Specifications* document.
    - The stitch count of the seams should be 4 stitches per 1 cm.
    - The seam stitch should be straight, uniform, and symmetrical, and should not have any breaks or defects.
    - The stitch should be durable and not break when pulled apart with hands.
    - The seam stitch should be able to resist a pulling force of over 12N.
    - All seam stitches should be reinforced at the extremities.
- All components of the product should be symmetrical.
- Prior to any production process, the manufacturer should conduct the dimensional stability test (the ability of the fabric to preserve its initial form once it has undergone the process of cutting, sewing, washing, ironing, etc.)
- Depending on the type, the fabric should not be washed or ironed at temperatures that exceed those specified by the manufacturer on the technical sheet or those specified in this document. Also, ironing should not leave any shiny patches on the fabric.
- The fabric should have high resistance against UV radiation.

- The fabric should be highly durable and resistant against wear and tear.
- The product should be easy to maintain.
- The article should be manufactured in the sizes that will result from the body measurements of all employees of the *State Police*. The control group of the *State Police* will approve the results of the body measurement process.
- The *Velcro* loop tapes should not show signs of raveling after frequent use.
- The materials and accessories used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The bib should be equipped with a fabric label with the following information: manufacturer's name, year of production, size, composition and maintenance instructions. The label should be stitched at the center of the collar tapes stitch. The label should be folded. On one side should be the maintenance information while on the other side should the name of the manufacturer, year of production, name of the article and size.

Upon delivery, the products should be clean, ironed, folded and free of stains. They should be placed inside polyethylene bag. The bags should be placed in cardboard boxes. Each box should have an equal number of products.

The cardboard of the boxes (weighing around 600gr/m²) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

ANNEX - The list of tests that must be accompany the technical offer of this article and standards on which these tests are based.

Tests	Testing methods according to ISO standards
Composition	ISO 1833: 2010 Textiles - quantitative chemical analysis
Weave type	ISO 7211- 1: 1984 Textiles - woven fabrics - construction
Weight gr/m²	ISO 3801:1977 Textiles - Woven fabrics - Determination of mass per unit length and mass per unit area
Density	ISO 7211-2: 1984 Textiles -Woven fabrics - Construction - Methods of analysis - Part 2: Determination of number of threads per unit length
Metric number	ISO 7211-5: 1984 /UNI 9275 Textiles - Woven fabrics - Construction - Methods of analysis - Part 5: Determination of linear density of yarn removed from fabric
Pulling resistance	ISO 13934-1:2013 Textiles - Tensile properties of fabrics - Part 1: Determination of maximum force and elongation at maximum force using the strip method.
Color fastness	ISO 105 -C06: 2010 Textiles - Tests for Color fastness - Part C06: Color fastness to domestic and commercial laundering

	ISO 105- E01: 2013 Textiles - Tests for Color fastness - Part E01: Color fastness to water
	ISO 105-E04 : 2013 Textiles - Tests for Color fastness - Part E04: Color fastness to perspiration
	ISO 105 - X12: 2016 Textiles - Tests for Color fastness - Part X12: Color fastness to rubbing
Light fastness (UV radiation)	ISO 105- B02: 2014 Textiles - Tests for Color fastness - Part B02: Color fastness to artificial light: Xenon arc fading lamp test
Rub fastness	ISO 12947-2: 1998 Textiles - Determination of the abrasion resistance of fabrics by the Martindale method
Pilling effect	ISO 12945-2: 2000 Textiles - Determination of fabric propensity to surface fuzzing and to pilling - Part 2: Modified Martindale method

*Note! The State Police will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Ceremonial leather belt

1. MATERIALS

a. The base material that will be used for the production of the *ceremonial leather belt* should be of the highest quality and with the following technical specifications:

Composition	full calf hide, first layer
Color	white, uniform, semi glossy
Thickness	4 mm
Tanning	half chromic
Leather dye resistance	grade 4 - 5
Treatment	waterproof
Humidity	no less than 18%
Ash	no less than 3.4%
Fat	8–15%
Washing chemicals	no more than 6%
Leather solution	37-46%
Tanning grade	no less than 55%
Tanning test	positive
Non tanned when cut test	negative
pH of the washing chemicals	no less than 3.5
Stretching until snap	35%
Stretching from load	no less than 25/10 MPa
Resistance to surface cracks	no less than 2/10 MPa
Durability until snap	no less than 2.5/10 MPa

The base material requirements for the natural calf leather were based on the Albanian Standard (SSH) 1145: 1990, "Telatinë".

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the leather of the final product should be identical to the sample provided by the participant entity in the *technical bid*.

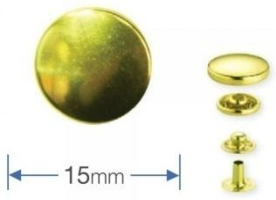
A simple rubbing fastness test will also be conducted on the sample provided in the *technical bid*. The colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the color doesn't stain the white cloth.

The *quality control group* will not approve the use of materials where the following defects may be present (the list is not exhaustive):

- cutting on the side of the flesh that does not exceed 1/3 of the thickness,
- scratches on the surface,
- damage from decay,

- surface cracks from leveling,
- surface cracks from four folds,
- vainness,
- non uniform dyeing,
- fat, chrome or extract stains,
- scars from flesh wounds,
- weak areas,
- fat wrinkles in the body and neck,
- indentation from leathering,
- ripples and holes,
- tick marks,
- wrinkles or folding in the trestle,
- gradation from leveling,
- attenuation from sawing,
- oxidations,
- porosity,
- and any other irregularities that may negatively affect the functionality and esthetics of the glove.

b. Auxiliary materials and accessories that shall be used for the construction of the article *ceremonial leather belt* should be of the highest quality*:*

<table>
<tr><th colspan="4">Buckle</th></tr>
<tr><td rowspan="6"> 
</td><td>Composition</td><td colspan="2">brass (zinc and copper alloy), of the highest quality and rust free.</td></tr>
<tr><td>Size</td><td colspan="2">5.5 x 7.5 cm</td></tr>
<tr><td>Texture</td><td colspan="2">golden, high gloss</td></tr>
<tr><td>Fastening</td><td colspan="2">with two pins</td></tr>
<tr><td rowspan="3">Embossing</td><td colspan="2">State Police Emblem</td></tr>
<tr><td>Size</td><td>4 x 4.6 cm</td></tr>
<tr><td>Texture</td><td>golden, high gloss</td></tr>
<tr><th colspan="4">Metal rivets</th></tr>
<tr><td rowspan="3"> 
</td><td>Diameter</td><td colspan="2">9 mm</td></tr>
<tr><td>Texture</td><td colspan="2">golden, high gloss</td></tr>
<tr><td>Composition</td><td colspan="2">brass (zinc and copper alloy)</td></tr>
<tr><th colspan="4">Threads</th></tr>
<tr><td rowspan="4">Threads for the stitches of the accessories and belt loops.</td><td>Composition</td><td colspan="2">100% cotton</td></tr>
<tr><td>Metric number</td><td colspan="2">50 Nm</td></tr>
<tr><td>Resistance to pulling force</td><td colspan="2">not less than 12N</td></tr>
<tr><td>Color</td><td colspan="2">same as belt</td></tr>
</table>

The buckle will undergo the following tests:

- **Resistance to water.** There should be no changes to the surface after the product has been soaked in distilled water for 24 hrs at a temperature of 25° C.
- **Resistance to detergents.** There should be no changes to the surface after the product has been soaked for 24 hrs in water with 3% hard soap at a temperature of 25° C.
- **Resistance to solvents.** There should be no changes to the surface after the product has been lightly brushed with methanol and then with benzene.
- **Resistance to sodium chloride.** There should be no changes to the surface after the product has been soaked in 1% salted water for 24 hrs at a temperature of 25° C
- **Wash color fastness.** There should be no changes in color when treated with 5% solution of hydrogen chloride.
- **Resistance to corrosion.**

The final product will undergo a simple physical examination to ensure that all technical specifications are met: that the used materials are suitable for the product, the general visual appearance and construction, design, aesthetic values, etc. The examination will be conducted visually and with the help of tools.

The *quality control group* will not approve any buckle where the following defects may be present (the list is not exhaustive):

- rough surfaces,
- color shading,
- variations in the density of the material.
- detached parts,
- holes and cracks,
- uneven casting,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

c. Objects that shall be used for the packaging of the article *ceremonial leather belt.*

Thin paper for the packaging of one belt.
Plastic bag for the packaging of one belt.
Cardboard box for the packaging of 50 belts or more.

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

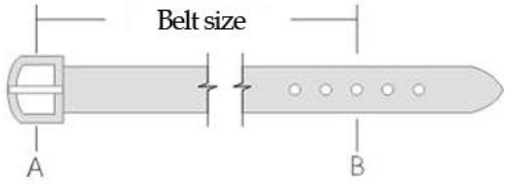
2. SIZES AND QUANTITY

The article *ceremonial leather belt* will be ordered and manufactured in the sizes S - 4XL and in the quantities that will result from the measurements that will be taken from the employees of the *State Police*.

Taking the measurements

The following measurements should be taken in order to determine the sizes for this article:

Waist (the belt should be worn on top of the jacket)	cm



From the buckle (A) to the favorite belt hole (B)

Belt size						
S	M	L	XL	XXL	XXL	4XL
71-76 cm	81-86 cm	91-96 cm	101-106 cm	111-116 cm	121-127 cm	132-137 cm

3. REFERENCE COLORS

The color of the belt and holster should be white.

The texture of the metal accessories should be golden.

The colors set forth in this document should serve as a reference for the manufacturer. They will only be approved once the prototypes have been delivered.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

4. THE PROCESSING AND THE PREPARATION OF THE BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

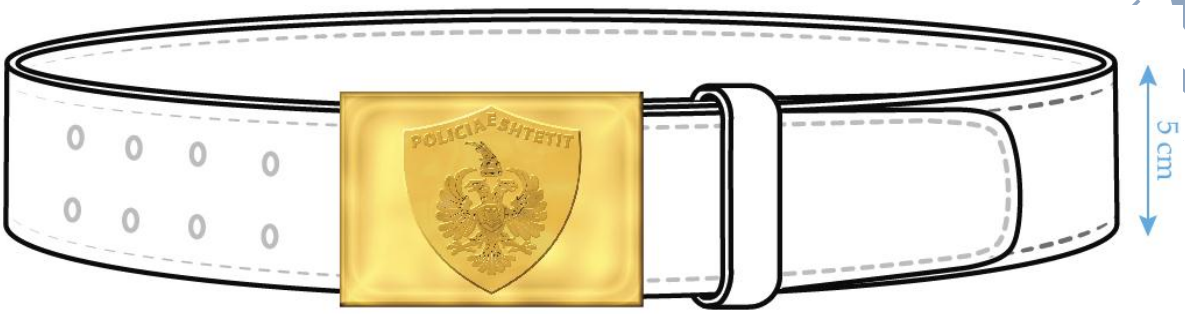
Cutting

The cutting should be done in such way that most of the material may be used. The belt should consist of one single piece of leather. The edges should be uniform and smooth, especially in the curved areas. The belt should be cut in a way that it allows for maximum flexibility.

5. CONSTRUCTION OF THE BELT

Technical instructions for the production of the ceremonial leather belt.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.



The ceremonial belt should be made with white goat leather.

- Leather
- Double pin metal buckle
- Loops

LEATHER

The leather should be 5 cm wide for both genders. The outer facing of the belt should be glossy finished while the back facing should feature the stamped manufacturing details: name of manufacturer and size.

The belt should feature 10 pairs of holes measuring 10 mm in diameter at a distance of about 25 mm from each other.

The tip should have rounded corners.

The belt should have two fake single needle straight edge stitches at a distance of about 3mm from the edges. The edge stitches should be hot pressed into the leather.

BUCKLE

The belt should have a ceremonial type rectangular plaque buckle with two pins positioned on the vertical axis one side and a metallic loop attached to the plaque on the other side. The distance between the pins should coincide with the distance between the belt holes. The shape of the buckle should be identical for both genders.

The buckle should be mounted to the belt with a folded piece of leather and fastened with a metal rivet.

The emblem of the *State Police* should be embossed in the center of the plaque buckle.

BELT LOOPS

The belt should have two belt loops for holding the tip in place. They should be made with the same leather as the belt itself.

The belt loops should be about 14 mm wide. The leather should be about 3 mm thick.

Constant dimensions	
Width	5 cm
Thickness	4 mm

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- The leather parts that will be in contact with the skin should not scratch, irritate or damage the skin.
- The article should be manufactured in the sizes that will result from the body measurements of all employees of the *State Police*. The control group of the *State Police* will approve the results of the body measurement process.
- The allowed size error limit for the product is ± 1–1.5 cm at the length and ± 1 mm at the width.
- The leather should be maximally resistant to wear and tear.
- The leather should meet the following qualitative requirements:
  - Should be uniformly tanned.
  - The outer side should be clean, smooth, without stains.
  - The dyeing should be uniform.
  - The inner side should be free of remains from preparatory stages.
  - The leather should be highly flexible.
  - The leather should be well oiled.
  - The leather should be well pressed.
  - Should have a uniform thickness.
  - Should be compact.
  - The surface coating should adhere well.
- The materials used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The belts should be covered in thin paper, rolled and put inside polyethylene bags. The bags should be placed inside a cardboard box. Each box should contain 50 belts of the same size.

The cardboard of the boxes (weighing around 600gr/ m^2) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

ANNEX – THE LIST OF TESTS RESULTS THAT SHOULD ACCOMPANY THE TECHNICAL OFFER AND THEIR RESPECTIVE TESTING METHODS.

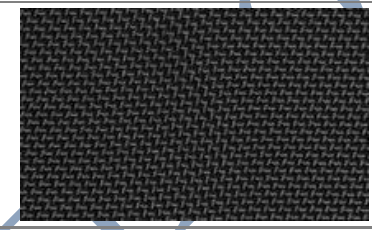
Test	Testing method according to ISO* standard	
Identification of leather	ISO 17131:2012	Leather - Identification of leather with microscopy
Thickness	ISO 2589:2016	Leather -- Physical and mechanical tests -- Determination of thickness
Tanning	ISO/DIS 15115	Leather — Vocabulary
Humidity	UNI 10741:1999	Leather – Method for determining the moisture content.
Ash	ISO 4047:1977	Leather -- Determination of sulphated total ash and sulphated water-insoluble ash
Fat	ISO 4048: 2008	Leather -- Chemical tests -- Determination of matter soluble in dichloromethane and free fatty acid content
Washing chemicals	ISO 4044:2017	Leather -- Chemical tests -- Preparation of chemical test samples
Leather solution		
Tanning grade		
Color resistance	ISO 15700:1998	Leather -- Tests for color fastness -- Color fastness to water spotting
	ISO 11640: 2013	Leather -- Tests for color fastness -- Color fastness to cycles of to-and-fro rubbing
	ISO 11642: 2012	Leather -- Tests for color fastness -- Color fastness to water
pH	ISO 4045:2008	Leather -- Chemical tests -- Determination of pH
Stretching until snap	ISO 3376:2011	Leather -- Physical and mechanical tests -- Determination of tensile strength and percentage extension
Stretching from load		
Durability until snap		
Resistance to surface cracks	ISO 3378:2002	Leather -- Physical and mechanical tests -- Determination of resistance to grain cracking and grain crack index

***Note!** The *State Police* will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Tactical belt

1. MATERIALS

a. The base material that will be used for the production of the *tactical belt* should be of the highest quality, appropriate for tactical clothing and with the following technical specifications:

Color	Black	
Composition	100% nylon	
Weight	850–950 D	
Weave type	Oxford	
Accessories weave type	Plain	
Color fastness	grade 4–5 (Gray Scale)	Dyeing should be done to the yarns.
Light color fastness (UV radiation)	grade ≥ 6 (Blue scale)	The fabric should be highly resistance.
Rub color fastness	over 20,000 cycles	
Pilling effect	grade 5	

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the fabric of the final product should be identical to the sample provided by the participant entity in the *technical bid*. It shall be subject to tests of wash, rub, chemical agent, sweat and light (UV radiation) fastness. The degree of the colorfastness of the fabric should be: *resistant - degree 4* and *very resistant - degree 5.* The degree of light fastness of the fabric should be: *no less than - grade 6: very good.*

A simple rubbing fastness test will also be conducted on the sample provided in the *technical bid*. The colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the color doesn't stain the white cloth.

The *quality control group* will not approve the use of fabrics and materials where the following defects may be present (the list is not exhaustive):

- *Velcro* loop tapes that ravel quickly,
- organic based impurities,
- oil or ink stains,
- color shading,
- oxidations,
- wrinkles,
- absence of warp and weft threads,
- slubs and nubs of warps and wefts,
- surface holes,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

b. Auxiliary materials and accessories that shall be used for the construction of the item the *tactical belt* should be appropriate for tactical clothing:

Velcro			
Velcro fasteners for the pouches. 	Composition		100% polyamide fibers
	Thickness when fastened		±3 mm
	Weight		41 g/m ± 5%
	Color		same as belt
	Thickness loop tape		2.2 mm
	Thickness hook tape		1.6 mm
	Resistance to extreme temperatures		
	Cold		- 30° C
	Hot	weakening point	180° C
		melting point	210 – 250° C
	Color fastness		
	Wash fastness		no less than 3
	Hot water fastness		
	Sweat fastness		
	Rub fastness		
Other accessories			
Webbings for the pouches. 	Thickness		3 mm
	Composition		100% najlon
	Color		black
Plastic buckle for the fastening of the belt. 	Composition		100% acetal
	Color		black
Rivets for the pouches. 	d. 15 mm		
	Composition		Brass (zinc and copper alloy)
	Color		black

Tape		
Tape for the outlining of the mesh frame and pouches. 	Color	black
	Width	2 cm (1 cm when stitched)

Threads		
Threads for all stitches	Composition	100% polyester
	Metric number	80 Nm
	Pull resistance	no less than 12N
	Color	same as belt

Labels		
Labels made with fabric for the identification of the manufacturer, jacket size and maintenance instructions.	Composition	100% polyester
	Color	white

c. Objects that shall be used for the packaging of the article *tactical belt:*

Plastic bag for the packaging of one belt
Cardboard box for the packaging of 50 belts

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

2. SIZES AND QUANTITY

The article *tactical belt* will be ordered and manufactured in four standard sizes and in the quantities that will result from the measurements that will be taken from the employees of the *State Police*.

Belt size				
	I	II	III	IV
Minimum length	70	80	100	110
Maximum length	95	105	120	137

Taking the measurements

The following measurements should be taken in order to determine the sizes for this article:

Around waist	cm

3. REFERENCE COLOR

The color of all the fabrics and all of its accessories should be black.

The color set forth in this document should serve as a reference for the manufacturer. It will only be approved once the prototypes have been delivered.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

4. THE PROCESSING AND PREPARATION OF BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

Pattern-making

Pattern-making should be done by following the standard methodologies for garment construction. The component parts of the item/ product must be compatible with each other and have clear visible lines of cutting and joining. All components must be positioned on the textile in the direction of the warp.

Cutting

The cutting should be done in such way that most of the material may be used. Special attention must be observed during the cutting of curved sides so that the edges are devoid of any serration.

Marking of the item's components

This process should guarantee that all the components of the product have the same color and tone without any visible shading.

5. CONSTRUCTION OF THE BELT

Technical instructions for the production of the tactical belt.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.

The belt without accessories

The belt and all of its accessories

The tactical belt, equipped with all necessary accessories should be appropriate for use by on duty police officers.

Components of the tactical belt:

- Belt
- Plastic buckle
- Belt loops

The belt's accessories:

- Sidearm holster
- Double flapped pouch for sidearm magazines
- Metal rings to hold the baton or flashlight
- Flapped pouch for the alcohol tester
- Flapped pouch for the cuffs
- Flapped pouch for the pepper spray can
- Flapped pouch for the walkie talkie
- Flapped pouch for a scope or metal detector
- Key holder
- Pouch for latex gloves

The belt size should be adjustable.
The belt should durable and be resistant to heavy use, tearing, abrasion, etc.
The belt should be fastened with a plastic buckle.
The pouches should be fastened with metal rivets.
The pouches should be equipped with loop for easy repositioning or removal.

Constant dimensions	
Width	6 cm
Thickness	3 – 4 mm

Belt accessories	
Double flapped pouch for sidearm magazines.	

Metal rings to hold the baton or flashlight.	
Flapped pouch for the alcohol tester.	
Flapped pouch for the cuffs.	
Flapped pouch for the pepper spray can.	
Flapped pouch for the walkie talkie	

Flapped pouch for a scope or metal detector	
Sidearm holster	
Key holder.	
Pouch for latex gloves.	

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- Sewing threads should have the exact properties specified in the *Technical Specifications* document.
    - The stitch count of the seams should be 4 stitches per 1 cm.
    - The seam stitch should be straight, uniform, and symmetrical, and should not have any breaks or defects.
    - The stitch should be durable and not break when pulled apart with hands.
    - The seam stitch should be able to resist a pulling force of over 12N.
    - All seam stitches should be reinforced at the extremities.
- All components of the product should be symmetrical.
- Prior to any production process, the manufacturer should conduct the dimensional stability test (the ability of the fabric to preserve its initial form once it has undergone the process of cutting, sewing, washing, etc.)
- The product should have high resistance against UV radiation.
- The product should be highly durable and resistant against wear and tear.
    - Load until tear lengthwise - 840 kg/PA
    - Load until tear widthwise - 700 kg/PA
    - Stretchiness from pull, both lengthwise and widthwise – 140%
    - Temperature of use -80º/+100° C
- The article should be manufactured in the sizes that will result from the body measurements of all employees of the *State Police*. The control group of the *State Police* will approve the results of the body measurement process.
- The allowed size error limit for the product is ±2%.
- The *Velcro* loop tapes should not show signs of raveling after frequent use.
- The parts of the product that will be in contact with the user should free of rough surfaces, sharp edges or projections that might cause irritation or damages to the skin.
- The materials and accessories used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The belt should be equipped with a fabric label with the following information: manufacturer's name, year of production, size, composition and maintenance instructions.

Upon delivery, the products should be clean, folded and free of stains. They should placed inside polyethylene bags. The bags should be placed in cardboard boxes. Each box should hold 50 belts.

The cardboard of the boxes (weighing around 600gr/ m²) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

The list of tests that must be accompany the technical offer of this article and standards on which these tests are based.

Tests	Testing methods according to ISO standards
Composition	ISO 1833: 2010 Textiles - quantitative chemical analysis
Weave type	ISO 7211- 1: 1984 Textiles - woven fabrics - construction
Metric number	ISO 7211-5: 1984 /UNI 9275 Textiles - Woven fabrics - Construction - Methods of analysis - Part 5: Determination of linear density of yarn removed from fabric
Color fastness	ISO 105 -C06: 2010 Textiles - Tests for Color fastness - Part C06: Color fastness to domestic and commercial laundering
	ISO 105- E01: 2013 Textiles - Tests for Color fastness - Part E01: Color fastness to water
	ISO 105-E04 : 2013 Textiles - Tests for Color fastness - Part E04: Color fastness to perspiration
	ISO 105 - X12: 2016 Textiles - Tests for Color fastness - Part X12: Color fastness to rubbing
Light fastness (UV radiation)	ISO 105- B02: 2014 Textiles - Tests for Color fastness - Part B02: Color fastness to artificial light: Xenon arc fading lamp test
Rub fastness	ISO 12947-2: 1998 Textiles - Determination of the abrasion resistance of fabrics by the Martindale method
Pilling effect	ISO 12945-2: 2000 Textiles - Determination of fabric propensity to surface fuzzing and to pilling - Part 2: Modified Martindale method

*Note! The State Police will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

TECHNICAL INFORMATION FOR THE PRODUCTION OF THE ARTICLE
Leather belt

1. MATERIALET

a. The base material that will be used for the production of the *leather belt* should be of the highest quality and with the following technical specifications:

Composition	full calf hide, first layer
Color	black, uniform, semi glossy
Thickness	4 mm
Tanning	half chromic
Leather dye resistance	grade 4 - 5
Treatment	waterproof
Humidity	no less than 18%
Ash	no less than 3.4%
Fat	8–15%
Washing chemicals	no more than 6%
Leather solution	37-46%
Tanning grade	no less than 55%
Tanning test	positive
Non tanned when cut test	negative
pH of the washing chemicals	no less than 3.5
Stretching until snap	35%
Stretching from load	no less than 25/10 MPa
Resistance to surface cracks	no less than 2/10 MPa
Durability until snap	no less than 2.5/10 MPa

The base material requirements for the natural calf leather were based on the Albanian Standard (SSH) 1145: 1990, "Telatinë".

Note: Please refer to the Annex at the end of this document to get acquainted with the full list of tests that must accompany the article.

The color of the leather of the final product should be identical to the sample provided by the participant entity in the *technical bid*.

A simple rubbing fastness test will also be conducted on the sample provided in the *technical bid*. The colored sample will be rubbed against a piece of white cloth. The result will be considered positive if the color doesn't stain the white cloth.

The *quality control group* will not approve the use of materials where the following defects may be present (the list is not exhaustive):

- cutting on the side of the flesh that does not exceed 1/3 of the thickness,
- scratches on the surface,
- damage from decay,
- surface cracks from leveling,

- surface cracks from four folds,
- vainness,
- non uniform dyeing,
- fat, chrome or extract stains,
- scars from flesh wounds,
- weak areas,
- fat wrinkles in the body and neck,
- indentation from leathering,
- ripples and holes,
- tick marks,
- wrinkles or folding in the trestle,
- gradation from leveling,
- attenuation from sawing,
- oxidations,
- porosity,
- and any other irregularities that may negatively affect the functionality and esthetics of the belt.

b. Auxiliary materials and accessories that shall be used for the construction of the article *leather belt* should be of the highest quality:

Buckle		
	Composition	100% nickel
	Texture	grey, semi glossy
Metal rivets		
	Diameter	9 mm
	Texture	100% nikel
	Composition	grey, semi glossy
Threads		
Threads for the stitches of the accessories and belt loops.	Composition	100% cotton
	Metric number	40 Nm
	Resistance to pulling force	not less than 12N
	Color	same as belt

The *quality control group* will not approve any buckle where the following defects may be present (the list is not exhaustive):

- rough surfaces,
- color shading,
- variations in the density of the material.
- detached parts,
- holes and cracks,
- uneven casting,
- and any other irregularities that may negatively affect the functionality and esthetics of the uniform.

c. Objects that shall be used for the packaging of the article *leather belt*.

Thin paper for the packaging of one belt.
Plastic bag for the packaging of one belt.
Cardboard box for the packaging of 50 belts or more.

All components and accessories may be replaced with products that are similar or of better quality.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request.*

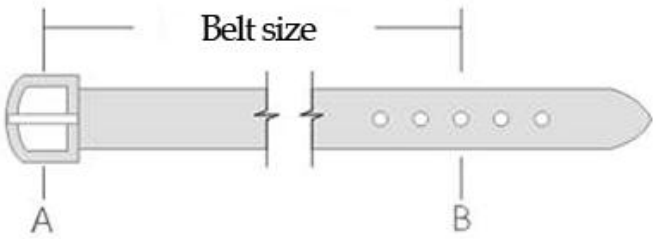
2. MASAT DHE SASIA E PRODHIMIT

The article *leather belt* will be ordered and manufactured in the sizes S - 4XL and in the quantities that will result from the measurements that will be taken from the employees of the *State Police*.

Taking the measurements
The following measurements should be taken in order to determine the sizes for this article:

Waist	cm

Belt size						
S	M	L	XL	XXL	XXL	4XL
71-76 cm	81-86 cm	91-96 cm	101-106 cm	111-116 cm	121-127 cm	132-137 cm



From the buckle (A) to the favorite belt hole (B)

3. REFERENCE COLOR

The color of the belt should be black.

The texture of the metal parts should be grey, semi glossed.

The color set forth in this document should serve as a reference for the manufacturer. It will only be approved once the prototypes have been delivered.

Warning! *Any improvements or replacements should be approved in advance by the work group of technicians of the State Police through a formal request*

4. THE PROCESSING AND THE PREPARATION OF THE BASE MATERIALS

The proper preparation and handling of the base and auxiliary materials is the foundation for the qualitative performance of the ensuing technological processes during production of the product.

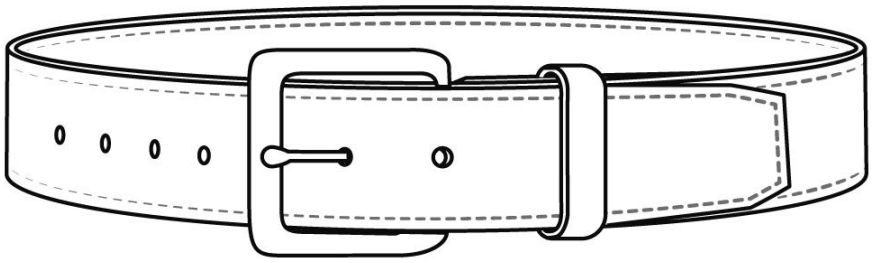
Cutting

The cutting should be done in such way that most of the material may be used. The belt should consist of one single piece of leather. The edges should be uniform and smooth, especially in the curved areas. The belt should be cut in a way that it allows for maximum flexibility.

5. CONSTRUCTION OF THE BELT

Technical instructions for the production of the leather belt.

These instructions may be modified or improved once the official prototype has been approved. Any modifications or improvements must be added to the Technical Specifications document only with the approval of the work group of technicians of the State Police.



The belt should be made with black calf leather.

The components of the belt:

- Leather
- Single pined buckle
- Belt loops

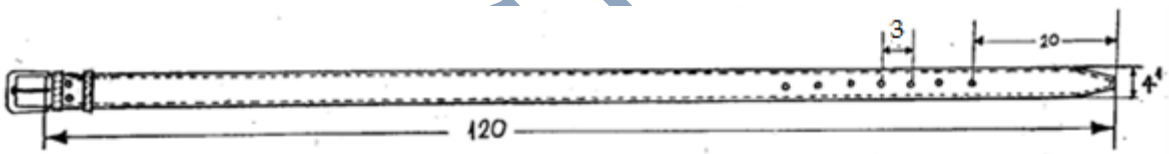
LEATHER

The leather should be 3.5 cm wide for men and 3 cm wide for women. The outer facing of the belt should be glossy finished while the back facing should feature the stamped manufacturing details: name of manufacturer and size.

The belt should feature 7 holes measuring 10 mm in diameter at a distance of about 30 mm from each other.

The tip should have cut corners.

The belt should have two fake single needle straight edge stitches at a distance of about 3 mm from the edges for esthetic purposes. The edge stitches should be hot pressed into the leather.



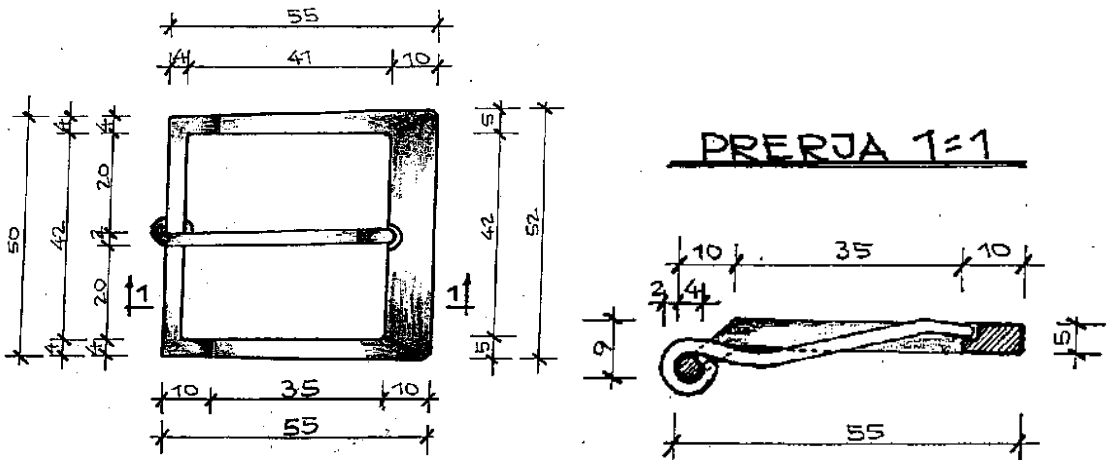
Warning! *The length of the belt varys according to size.*

BUCKLE

The belt should have a rectangular single pin metal buckle. The shape of the buckle should be identical for both genders.

The buckle and pins should be made with silver textured nickel.

The buckle should be mounted to the belt with a folded piece of leather and fastened with a metal rivet.



BELT LOOPS

The belt should have two belt loops for holding the tip in place. They should be made with the same leather as the belt itself.

The belt loops should be about 13 mm wide. The leather should be about 3 mm thick.

One of the loops should be assembled and fastened together with the buckle, while the other loop should be free.

Constant dimensions for the women's belt	
Width	3 cm
Thickness	4 mm
Constant dimensions for the men's belt	
Width	3.5 cm
Thickness	4 mm

6. IMPERATIVE CONDITIONS

- The final product should be identical to the prototype that was approved during the evaluation procedure.
- The leather parts that will be in contact with the skin should not scratch, irritate or damage the skin.
- The article should be manufactured in the sizes that will result from the body measurements of all employees of the *State Police*. The control group of the *State Police* will approve the results of the body measurement process.
- The allowed size error limit for the product is ± 1– 1.5 cm at the length and ± 1 mm at the width.
- The leather should be maximally resistant to wear and tear.
- The leather should meet the following qualitative requirements:
    - Should be uniformly tanned.
    - The outer side should be clean, smooth, without stains.
    - The dyeing should be uniform.
    - The inner side should be free of remains from preparatory stages.
    - The leather should be highly flexible.
    - The leather should be well oiled.
    - The leather should be well pressed.
    - Should have a uniform thickness.
    - Should be compact.
    - The surface coating should adhere well.
- The materials used in the production of this article should not contain chemicals harmful to human health or AZO dyes.
- The manufacturer of this article should be equipped with the certificate of standard ISO 9001.

7. PACKAGING AND LABELING

The belts should be covered in thin paper, rolled and put inside polyethylene bags. The bags should be placed inside a cardboard box. Each box should contain 50 belts of the same size.

The cardboard of the boxes (weighing around 600gr/m²) should be appropriate for the secure transportation of the products. Each box should have a sticky label with information on product size, year of production, the quantity of products the box holds and the name of the manufacturer. The boxes should be free of damages and sealed with adhesive tape.

The list of tests that must be accompany the technical offer of this article and standards on which these tests are based.

Tests	Testing methods according to ISO standards
Composition	ISO 17131:2012 Leather - Identification of leather with microscopy
Thickness	ISO 2589:2016 Leather - Physical and mechanical tests - Determination of thickness
Tanning	ISO/DIS 15115 Leather — Definitions
Humidity	UNI 10741:1999 Leather - Method for determining humidity.
Ash	ISO 4047:1977 Leather - Determination of sulphated total ash and sulphated water-insoluble ash
Fat	ISO 4048: 2008 Leather -Chemical tests - Determination of matter soluble in dichloromethane and free fatty acid content
Washing chemicals	ISO 4044:2017 Leather - Chemical tests - Preparation of chemical test samples
Leather solution	
Tanning grade	
Leather dye resistance	ISO 15700:1998 Leather - Tests for Color fastness - Color fastness to water spotting
	ISO 11640: 2013 Leather - Tests for Color fastness - Color fastness to cycles of to-and-fro rubbing
	ISO 11642: 2012 Leather - Tests for Color fastness - Color fastness to water
pH of the washing chemicals	ISO 4045:2008 Leather - Chemical tests - Determination of pH
Stretching until snap	ISO 3376:2011 Leather - Physical and mechanical tests - Determination of tensile strength and percentage extension
Stretching from load	
Durability until snap	
Resistance to surface cracks	ISO 3378:2002 Leather - Physical and mechanical tests -Determination of resistance to grain cracking and grain crack index

*Note! The State Police will accept only the technical data sheets of the base materials that conform to internationally accepted testing methods, equivalent to those specified in the table above.

PHYSICAL EXAMINATION

The *State Police* reserves the rights to guarantee the quality of the final product through a control mechanism called *physical examination*. The physical examination process includes the following steps:

1. Cross-checking of the laboratory analysis of the fabrics and leather.
2. Measurements and physical examination of the whole product or their individual components.
3. Comparison of measurement results with the specifications set forth in the *Technical Specifications* document.

Once all cross-checks have been conducted successfully by the *quality control group* and all results have been positive, as provided in the contract and the document of *Technical Specifications*, the *State Police* will formally accept the final product. The article will be considered accepted only if it fully meets the requirements of the Technical Specifications.

WARRANTY

The warranty should be 1 year for the articles designated for use for 1 year and at least 2 years for the articles designated for use for more than 2 years. In cases where the item is defective as a result of non-compliance with the technical requirements specified in this document, the Economic Operator must provide the complete repair or replacement of the item, free of charge, in accordance with the technical specifications in this document. The delivery of the goods must be accompanied by the declaration of guarantee. The warranty period begins after the physical examination.

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The document of the Technical Specifications of the chapter Accessories has 94 pages.