

## **EUROPOLTECH Exhibition Scope**

### **I. Crime detection technology**

1. Computer-based technologies for recording papillary traces and their digital processing using a digital camera, a digital camcorder and Poliview.
2. Visualisation of papillary traces with laser light sources.
3. Equipment for photographing small objects (incl. papillary traces on difficult surfaces using various lighting sources).
4. DNA marking system for property, incl. especially the possibility of DNA marking forgery and the recovery of removed DNA marks.
5. Equipment for inspecting modules and subcomponents in vehicles to determine the VIN of stolen vehicles,
6. Fibre and coating test equipment.
7. Modern methods of lie detection (polygraph, voice analysis, EGG)
8. Equipment for technical tests on documents; equipment and technologies for counterfeit banknote detection.
9. Screening equipment for explosive devices (incl. X-ray for detonators, grenades, mines, etc.).
10. Protective equipment for work with explosive materials and devices.
11. Basic examination equipment (examination kits, protective clothing, materials for evidence preservation, packaging, marking systems).
12. Equipment for examination rooms to reveal microtraces.
13. Systems for measuring the speed of projectiles fired.
14. Cameras for recording projectile trajectory.
15. Equipment for comparative analysis of shell-cases and projectiles.
16. Portable ventilation systems.
17. Electronic devices for encoding and decoding immobilisers.
18. Crime detection traps.
19. Optical devices for crime detection tests; photo and video equipment.
20. Computer composite image systems.
21. Hardware and software for digital data carrier examination (hard drives, memory cards, internal memory, etc.)
22. Apparatus for chemical analysis.
23. Flaw detectors.

### **II. Crime identification and documentation support systems and equipment – operations technology**

1. IT analytical systems – criminal analysis.
2. Devices and wearable equipment to support direct observation of persons and documentation of events.
3. Equipment, devices and systems to enable remote observation of persons and moving objects.
4. Equipment, devices and systems for undercover documentation of sound and vision.
5. Video and audio signal transmission links using radio, power lines, LAN and GSM
6. Large capacity audio and audio-video signal recorders, including vehicle-based recorders.
7. Smart cameras with software; respond to changes in the frame of interest based on selected presets.
8. High sensitivity CCTV cameras.

9. Secure (encoded) audio and video transmission systems (loudspeaking) for classified witness testimony in court proceedings.
10. Recognition systems for vehicle number plates and container numbers.

### **III. Optics, optoelectronics and electronics**

#### **A. Specialist equipment and accessories:**

1. Speech transmission via infrared projector.
2. Short- and long-range lamps.
3. Stereoscopes.
4. Monitors with increased mechanical strength (for vehicle applications).
5. Miniature GPS/GPRS location devices.
6. High-performance power sources (batteries, rechargeable batteries).
7. Software and hardware tools for audio and video signal correction.
8. Software and hardware tools to support the identification of mobile phones.

#### **B. Image processing:**

1. Traditional photographic equipment.
2. Digital photographic equipment.
3. Photographic cameras - miniaturisation.
4. Line scan cameras.
5. Projection of still frame or TV images.
6. Cartography.

#### **C. Sighting equipment:**

1. Fire control systems.
2. Rangefinders.
3. Sighting and observation systems.
4. Telescoping sights.
5. Optical aiming devices.

### **IV. Information and telecommunication technologies (ICT)**

1. Hardware and software for mobile access to information resources – the application of standards, practical verification of products for standard compliance.
2. Systems to ensure user authentication and their impact on the security of sensitive and classified information.
3. Artificial intelligence – hardware and software.
4. Standard integrated systems for IT logistics services; customisation options to meet the specific requirements of public institutions (staff, finances, data recording, transport, supplies)
5. Data transmission technologies.
6. Integration of data transmission services (transmission of data, sound, vision etc. in a single data layer).
7. Security of IT systems in the context of the globally connected teletransmission networks and the impact of a task on classified information processing systems.
8. Vehicle and moving object location systems.
9. Security of classified information transmission.
10. ICT support options for Police services in performing their legally required tasks.
11. Mobile equipment dedicated to Police officers for use in field conditions; secure fastening of equipment in vehicles.

12. IT systems for crisis management.
13. Supply systems for communications equipment (power systems for telecommunications, UPS, power generators).

## **V. Communications equipment**

### **A. Radio communications equipment:**

1. Shortwave and ultra-shortwave radio stations.
2. Radio-telephones – trunking systems.
3. Mobile communication for police forces – GSM-PRO virtual trunking.
4. Satellite communications equipment.
5. Radio links.
6. Stationary, transportable and portable radiotelephonic conventional and trunking systems.
7. Short range communication systems commanding police sub-units.
8. Conventional and trunking communication systems.

### **B. Wire communications equipment:**

1. Private branch stationary and mobile exchanges for wire communications.
2. Digital telephone exchanges for Police headquarters, including power supply systems.
3. DECT systems for telephone exchanges.
4. Stationary and mobile commutating equipment.
5. Telephone sets, faxes and other terminal units.
6. Systems for registration (recording) of calls (telephone conversations) for on-duty units.

## **VI. Hardware and specialist equipment to support traffic control and incident documentation**

1. automatic devices for speeding measurement and documentation
2. emergency van equipment to support the examination and documentation of accidents, including:
  - a) thermovision cameras (for ABS-braking track reconstruction)
  - b) electronic pressure gauges (tyre pressure checking),
  - c) windscreen light transmittance measuring devices,
  - d) equipment for inspecting modules and subcomponents in vehicles to determine the VIN of stolen vehicles – research capabilities.
3. Devices, hardware and software to support the documenting of accidents; spherical cameras, video cameras, photo cameras, digital maps and GPS
4. Devices and equipment for traffic control vehicles:
  - a) roof lights with programmable signs,
  - b) violation and crime recording devices,
  - c) speeding control and documentation equipment,
  - d) quick no-mouthpiece breathalysers and drug tests,
  - e) sound level meters,
  - f) traffic police personal equipment (lollipops, whistles, flashlights),

- g) barriers (smaller-than-standard),
  - h) binoculars with digital photo cameras for recording traffic violations,
  - i) mobile and fixed equipment for recording violations when going through a red light at a junction.
4. Mobile diagnostic stations for inspecting the technical condition of vehicles with special emphasis on environmental protection.
  5. Traffic Police communications systems and equipment - new technologies and state-of-the-art solutions.
  7. Review of driver working time measurement devices (electronic tachographs).
  8. Electronic location of traffic incident spots (with digital map), traffic accident location system on individual roads compatible with the SEWIK database.
  9. Software for analysing the causes of road accidents.

## **VII. Weapons, hardware and personal equipment for counter-terrorist units**

1. Small calibre weapons: handguns, machine pistols, support arms, sniper arms, smooth barrel shotguns, non-injurious weapons, grenade launchers.
2. Small calibre ammunition, special ammunition, grenades (smoke, tear gas, etc.), other projectiles (flares, thunder-flashes, etc.), special non-injurious products, pyrotechnic systems, fuses, pyrotechnic electric detonators, chemical agents.
3. Use of different types of arms, ammunition and chemical agents (smoke, gas) fired into buildings during shock troop operations.
4. Control, sighting and observation systems, telescoping sights.
5. Night vision and thermovision equipment.
6. Systems for overcoming obstacles in urban areas (gates, doors, etc.).
7. Direct coercion equipment, including handcuffs, knives, cutting tools, etc.
8. Innovative solutions in auxiliary equipment for the personal protection of police officers taking part in prevention unit and anti-terrorist group operations.
9. Special protective clothing (for shock troops, anti-chemical clothing, etc.).
10. Other special communications equipment.
11. Special equipment for vehicles.
12. Pyrotechnics robots.

## **VIII. Equipment and systems for access control and facility security**

1. Subcomponents, hardware, software and systems for the protection and monitoring of buildings and special rooms.
2. Subcomponents, hardware, software and systems for personal access control.
3. Subcomponents, hardware, software and systems for vehicle traffic control in the vicinity of a protected facility; recognition of number plates.
3. Alarm and anti-burglary subcomponents, hardware, software and systems.
5. Fire subcomponents, hardware, software and systems.
6. Infrared barriers (perimetric detection).
7. Digital recording equipment and systems for monitoring systems.
8. Traveller and luggage control equipment.
9. Electronic key distribution systems.

## **IX. Border protection equipment**

### **A. Border traffic control equipment:**

1. Radiometric control equipment.
2. Pyrotechnic control equipment.
3. Equipment for checking the authenticity of documents, registrations, visualisations and for identifying forged documents.
4. Equipment to disclose hidden spaces.
5. Equipment to disclose the contents of closed spaces (detection of compartments hidden in vehicles).
6. Equipment and materials to disclose drugs, psychotropic substances and intoxicants.
7. Thermovision equipment or other equipment to disclose hidden persons (also under no visibility conditions).

### **B. Border protection equipment for technological surveillance:**

1. Thermovision devices.
2. Night vision devices.
3. Radars, radiolocation systems.
4. Daylight surveillance devices.

### **C. Systems of perimeter border protection:**

1. Laser sensors.
2. Microwave sensors.
3. Infrared sensors.
4. Seismic sensors.
5. Supervision systems.

### **D. Non-invasive inspection devices**

1. Videoendoscopes.
2. Fiberscopes.
3. Borescopes.

### **E. Equipment for fuel storage and control.**

1. Fixed tanks (for fuel storage).
2. Fuel pumping equipment (pumps).
3. Fuel type (heating oil, diesel fuel) identification equipment.

### **F. X-ray devices.**

## **X. Emergency and rescue equipment**

### **A. Rescue and fire extinguishing equipment and vehicles**

1. Rescue and fire vehicles.
2. Vehicles with hydraulic lift.
3. Vehicles with mechanical ladder systems.
4. Container chassis, replaceable containers, container trailers.
5. Trailers and semitrailers with on-board specialist equipment.
6. Other rescue vehicles:
  - a) special rescue and fire vehicles,
  - b) technical rescue vehicles,
  - c) chemical rescue vehicles, with equipment
  - d) command vehicles

- e) supply vehicles,
- f) other special motor vehicles.
- 7. Water rescue equipment.
- 8. High altitude rescue equipment.
- 9. Containers and other logistics equipment.

**B. Personal protection equipment for rescuers:**

- 1. Compressed air breathing apparatus, with cylinders and masks.
- 2. No-motion detectors.
- 3. Special clothing to protect against chemical agents.
- 4. Special clothing to protect against thermal radiation and flame.
- 5. Belts.
- 6. Special clothing.
- 7. Special gloves.
- 8. Balaclava helmets (ski masks).
- 9. Special footgear.
- 10. Helmets.
- 11. Rescue harnesses.

**C. Measuring apparatus and equipment for identification of biological / chemical pollution and radioactive contamination.**

**XI. Small calibre weapons and ammunition**

**A. Weapons:**

- 1. Small calibre weapons.
- 2. Smooth barrel weapons.
- 3. Non-injurious weapons.
- 4. Grenade launchers.
- 5. Knives, cutting tools, blades.

**B. Ammunition and pyrotechnics:**

- 1. Ammunition (small calibre).
- 2. Grenades (tear gas, smoke, etc.).
- 3. Other projectiles (flare, thunder-flashes, etc.).
- 4. Special non-injurious products.
- 5. Explosives powders.
- 6. Pyrotechnic systems.
- 7. Inventions related to systems and equipment.
- 8. Igniters, detonators, electrical and pyrotechnic initiators.

**C. Special equipment:**

- 1. Water cannons.
- 2. Ballistic shields (jackets, helmets, shields).
- 3. Night vision equipment.
- 4. Laser rangefinders.
- 5. Optical measurement equipment.

## **XII. Transport**

1. Passenger cars, off-road vehicles and vans.
2. Special purpose vehicles – special fittings, control, equipment.
3. Motorcycles.
4. Boats.
5. Vehicle equipment and fittings:
  - a. Armour composite materials.
  - b. Vehicle protection equipment.
  - c. Audio and visual warning systems.
  - d. Special equipment – suspension, tyres, etc.

## **XIII. Uniform fabrics and articles, special-purpose and protective equipment**

### **A. Fabrics and accessories:**

1. Reflecting and special fabrics.
2. Special treatment, coating and camouflage.
3. Stiffening, panels, etc. for clothing.
4. Ballistic protection.
5. Non-woven materials.
6. High-strength fabrics and fibres – special fibres.

### **B. Apparel:**

1. Uniforms.
2. Work and training apparel.
3. Protective clothing (against fire, cold, rain).
4. Special clothing (protection against ABC weapons, gravity load).
5. Bullet proof, shrapnel-proof and anti-shock protective clothing (knee pads, epaulettes, jackets).

### **C. Individual equipment.**

1. Bags, pouches, cases.
2. Whistles, truncheons, handcuffs, etc.
3. Belts, equipment straps, harnesses, jackets, safety straps, cases, cartridge pouches.
4. Camouflage nets.
5. Shoes, boots, high boots.
6. Helmets.
7. Ear protection (active or passive).

## **XIV. Training equipment**

1. **Shooting training equipment.**
2. **Targets for shooting-ranges.**
3. **Training ammunition - marking cartridges.**

## **XV. Miscellaneous areas, technologies and inventions related to the scope of the exhibition**