# *ANNEX II + III:* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract Title: Supply of border control and forensic equipment for EUAM Ukraine**

**Lot 2: Border Control Equipment**

**Publication reference: EUAM-24-75, Lot 2**

**Column 1-2 should be completed by the Contracting Authority**

**Column 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the Contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the Contracting Authority shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words “compliant” or “yes” are not sufficient),
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation.

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Technical offers that do not permit to identify precisely the models, their type, brand, article numbers and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offered specifications.   
Link to the website where the description of the proposed model exists is not acceptable. It is obligatory to add the detailed description of specification offered.

Where the tenderer has offered an “equivalent” item to a brand and model indicated in these technical specifications, it will be the tenderer’s responsibility to prove the claimed equivalence, for example by appending to his offer for the respective item a comparison table with the features and functionalities of the item mentioned by its brand name and model in these specs and the corresponding features and functionalities of the product offered by the tenderer.

| **Item number** | **Specifications Required** | **Specifications Offered**  **(Brand, model, technical characteristics of the offered item)** | **Notes, remarks,**  **ref to documentation** | **Evaluation Committee’s Notes** |
| --- | --- | --- | --- | --- |
| **1** | **Vehicle Inspection Tool Set**  **Purpose**  The vehicle inspection tool set is intended specifically for technical inspection of vehicles and luggage in situations involving suspected smuggling of narcotics or other prohibited items. It is designed for controlled disassembly, access to internal vehicle compartments, and inspection in a garage or checkpoint environment, including opening of service panels, doors, and hidden hatches.  **Minimum Content**  ***Wrenches and Spanners***  • Socket Wrench Set: 6–32 mm jaw opening  • Open-End Wrench Set: 6–32 mm jaw opening  • Ring Spanner Set: 6–32 mm jaw opening  • Adjustable Wrench  ***Pliers and Gripping Tools***  • Flat-Nose Pliers  • Round-Nose Pliers  • Long-Nose Angled Pliers  • Locking Pliers: 250 mm  • Pliers for Wire Ropes and Bolts: 450 mm  ***Special Access Tools***  *(For controlled disassembly and non-destructive access to internal compartments)*  • Mini Crowbar: For prying open panels or covers  • Trim Removal Tool: For safe removal of plastic or interior trims without damage  • Pry Tool: Slim metal lever for accessing narrow gaps or hidden latches  ***Keys***  • Internal Hex Key Set: 1.5–10 mm (includes sizes: 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm)  • Long Hex Keys: 162 mm and 305 mm  ***Brushless Impact Driver/Drill***  Purpose: for professional use during vehicle disassembly and inspection.  Minimum Requirements:  • Voltage: 18 V or 20 V MAX  • Torque (impact mode): ≥ 150 Nm  • Maximum speed: ≥ 2500 rpm  • Impact rate: ≥ 3000 IPM  Battery and Power:  • Battery type: Li-Ion  • Capacity: ≥ 4.0 Ah, minimum 2 batteries included  • Charger:  o Input voltage 220–240 V, 50 Hz  Key Features:  • Drilling and impact fastening modes  • Magnetic bit holder  • Work area LED light  • Ergonomic non-slip grip  Accessories:  • Bit set: PH2, PZ2, SL6, Torx T20–T25  • Metal drill bit set: 4, 5, 6 mm  • Durable carrying case  ***Cutting and Striking Tools***  • Locksmith Hammers: 0.2 kg and 1 kg  • Claw Hammer: With rubber grip  • Hacksaw for Metal: Includes at least 2 changeable saw blades  • Scissors for Metal  • Chisel: 16×300 mm  ***Lifting and Measuring Equipment***  • Hydraulic Jack: Up to 5 tons capacity  • Measuring Tape: 7 m and 15 m  • Ultrasonic Distance Measurer: With laser pointer  ***Lighting and Power Supply***  • Battery-Operated Headlamp: 3xR03  • Shockproof Torch: Battery-operated, 2xR20 (includes spare parts)  • Universal Battery Charging Device  • Electric Extension Cords:  o 1.5 m for internal work (4 sockets)  o 15 m for external work  ***Accessories***  • Indicator (Tester) Screwdriver: Up to 500 V  • Tool Belt  • Work Gloves: At least 2 pairs  • Storage Cases: Big plastic and small plastic case  ***Additional Requirements***  • All tools must have an anti-corrosion coating or be made of non-corrosive metal.  • Tools must feature ergonomic handles with non-slip coating.  • Warranty for all tools: not less than 12 months |  |  |  |
| **2** | **Metal inspection probe – sampler with rubberized or plastic handle**  **Purpose:** Designed for inspecting small and loose cargo, detecting foreign objects and packages, and enabling sample collection from the controlled environment. The probe is versatile, offering multiple connection options, including different handles, probes, and extensions for enhanced functionality.  **Key Specifications:**   * Probe Length: Minimum of 1000 mm when fully extended * Handle Material: Rubberized or plastic for comfortable and secure grip * Versatile Design: Compatible with various probe extensions and handles for adaptable use in diverse inspection scenarios * Sampling Capability: Allows for efficient collection of samples from controlled environments * Durability: Constructed to withstand repeated use in challenging environments   This tool is essential for cargo inspection, offering flexibility, durability, and the ability to obtain samples or detect concealed items during security operations.  **The probe must have an anti-corrosion coating or be made of non-corrosive metal.** |  |  |  |
| **3** | **Video Probe Borescope (XL Detect+ or equivalent)**  **Purpose**: Portable device for internal visual inspection of vehicles, aviation, rail, and industrial equipment. Allows diagnostics and assessments in hard-to-reach areas without disassembly.  **Technical Specifications**:  **Display**   * + Type: Color LCD screen   + Minimum diagonal size: Not less than 5 inches   + Resolution: Not less than 640×480 pixels   **Insertion Probe**   * + Construction: Flexible and/or articulating   + Diameter: 4–6 mm (main), 8.5 mm (optional)   + Length: Not less than 5 meters   + Bending angle: Not less than 120° in at least one direction   + Protection: Not lower than IP65   **Camera**   * + Sensor type: Color CCD or CMOS   + Resolution: Not less than 440,000 pixels   + Features: Capable of operating in low-light conditions   **Illumination**   * + Type: Integrated LED lights   + Control: Manual or automatic brightness adjustment   + Effective range: Not less than 3 meters   **Memory and Recording**   * + Internal memory: Not less than 8 GB   + Expansion: Support for USB drives or microSD cards   + **Recording formats**:     - Photo: JPEG or equivalent     - Video: MPEG-4 or equivalent   **Power Supply**   * + Battery: Not less than 4 hours of continuous operation   + Additional: Ability to operate from a 220V power source   **Interfaces**   * + Must have at least one of the following:     - USB     - HDMI     - Wi-Fi     - Memory card slot   **Carrying Case and Protection**   * + Case: Shock-resistant and water-resistant   + Maximum weight (including case): Not more than 9 kg   **Operating Conditions**   * + Operating temperature: Not less than -10°C and not more than +50°C   + Humidity: Up to 95% (non-condensing)   **Language**: Interface and documentation: English or Ukrainian (preferred)  **Warranty:**  Minimum 12-month warranty with service support and component replacement in case of manufacturing defects. |  |  |  |
| **4** | **Flashlight (Fenix C7 or Equivalent)**  High-performance flashlight designed for professional use in demanding environments, including security, emergency response, maintenance, and search operations.  **Key Specifications:**  Brightness: Not less than 1500 lumens  Beam Distance: Minimum 300 meters for long-range illumination.  Runtime:  • On lowest brightness: At least 45 hours continuous use.  Lighting Modes:  • Multiple brightness levels (from ultra-low to maximum).  • Strobe mode for emergency signaling.  • Optional: SOS mode for emergency signaling.  • Eco mode for energy-saving operation and extended runtime.  Power Source:  Rechargeable Li-ion battery (capacity not less than 4800 mAh).  Charging:  • USB Type-C charging for fast and efficient recharging.  • Charging time: Fully recharged in 4 hours or less.  Additional Features:  • Lanyard included for easy carrying.  • Overheating protection to prevent damage from prolonged use.  • Switch for quick mode changes.  Waterproof Rating: Minimum IPX8 or IP68  Impact Resistance: Drop-resistant from 1 m or more.  Temperature Range: Not less than from -20°C to +40°C.  Weight: Not more than 350g.  Material: Aircraft-grade aluminum body for durability and corrosion resistance.  Warranty: At least 24-months warranty  English or Ukrainian (preferred) language user manual |  |  |  |
| **5** | **Vehicle Diagnostic Scanner**  A high-performance diagnostic tool designed for comprehensive vehicle diagnostics. Ideal for automotive professionals to diagnose, troubleshoot, and monitor vehicle systems in real-time across various makes and models.  Key Specifications:  Diagnostic Coverage:  • Full system diagnostics for all vehicle modules, including:  o Engine, Transmission, ABS, Airbag (SRS), Suspension, Fuel System, HVAC, Audio, Lighting, Battery.  o Hybrid/EV support: Basic Battery Management System (BMS) diagnostics.  Service Functions:  • Oil Reset, EPB Reset, TPMS Reset, DPF Regeneration, SAS Calibration, Throttle Matching, A/F Adjustment.  Real-Time Data Monitoring:  • Displays live data for all vehicle parameters.  • Freeze frame data for recording snapshot data at the moment of a fault.  OBD II Compatibility:  • Supports all OBD II-compliant vehicles (1996+).  • CAN protocol support.  • Covers US, European, and Asian brands.  • Supports a wide range of modern vehicle protocols, including CAN and other advanced diagnostic systems in contemporary vehicles.  Advanced Diagnostic Functions:  • Read/Clear fault codes.  • Live data graphing.  • Active component testing (injectors, relays, etc.).  • Special functions: Oil reset, EPB, DPF, BMS, SAS calibration.  Diagnostic Reports:  • Ability to generate, save, and print detailed diagnostic reports  • Ability to email reports directly from the device.  Screen:  • Not less than 4" color LCD screen with a resolution of 800x480 pixels or higher.  Connectivity:  • USB interface (e.g., Mini USB 2.0, USB Type-C, or equivalent) for data transfer and software updates.  • Built-in memory and/or Micro SD card slot (not less than 16GB) for data storage and backup  • Optional wireless support (Wi-Fi / Bluetooth).  Software and Updates:  • Free updates for the warranty period.  • Compatible with Windows and macOS for easy data transfer and report generation.  Power Source:  • Rechargeable lithium-ion battery with at least 8 hours of continuous use.  • USB charging for fast and efficient recharging.  • Charging time: Fully recharged in 4 hours or less.  Optional Features:  • Switch for quick mode changes  • Built-in flashlight for use in low-light conditions.  • Overheating protection to prevent device damage.  • Battery Level Indicator for real-time monitoring of battery status.  Durability:  • Rubberized casing.  Operating Temperature Range:  • not less than from -10°C to +50°C.  Weight and Size:  • Not more than 2 kg for portability and ease of use.  Included in the Package:  • OBD II cable.  • USB cable.  • Micro SD card (not less than 16 GB).  • Carrying case.  • Quick start guide.  Language:  • Interface and documentation: English or Ukrainian (preferred).  Warranty:  • Minimum 24-month warranty with free service support and component replacement in case of manufacturing defects. |  |  |  |
| **6** | **Under vehicle inspection mirror**  **Purpose**: This tool is essential for inspecting the undersides of vehicles such as cars, trucks, and buses, helping to identify hidden damage, contraband, or other issues that require close examination of hard-to-see areas.  **Key Specifications**:   * Telescopic Rod: Extendable metal rod, minimum length of 1-2 m, for easy adjustment and access to under-vehicle areas, with a locking mechanism to secure the rod in place at the desired length for stability during inspection. * Hand Grip: Ergonomic plastic or rubberized grip for comfortable handling and control * Parabolic Mirror: Provides a wide viewing angle for better inspection of vehicle undercarriages, made of shatterproof polycarbonate with an anti-glare coating to ensure clear visibility and durability. * Flashlight: Integrated flashlight for illumination in low-light or dark conditions   **Included in the Package**:   * Inspection mirror with telescopic rod * Flashlight with batteries   **Applications**: Ideal for law enforcement, border control, and vehicle inspection centers for inspecting vehicle undersides for hidden items or structural issues. This tool allows for efficient and detailed inspection without the need for vehicle lifting equipment. |  |  |  |
| **7** | **Contraband Detection Kit (CSECO CE-40 or Equivalent)**  **Purpose:** This comprehensive kit is designed for effective detection of concealed contraband across various environments. Ideal for use in security, law enforcement, and customs inspections, the kit includes advanced tools for detecting hidden items in vehicles, cargo, and other containers.  **Components and Key Specifications:**   1. **Videoscope (Perfect Vision V20 or Equivalent)**    * **Probe**: Flexible, fuel-resistant, and durable for harsh environments.    * **Display**: Color LCD, minimum 5-inch size with a resolution of 640×480 pixels or higher.    * **Articulation**: Bending angle of at least 120° in one direction.    * **Power**: Rechargeable batteries with SD card slot for photo/video capture.    * **Waterproof**: IP67 or equivalent rating for water and dust resistance. 2. **Density Meter (Buster K910B or Equivalent)**    * **Technology**: Detects concealed contraband by measuring density differences.    * **Accuracy**: ±0.02 g/cm³, with alarm for significant density changes.    * **Power**: Rechargeable battery, capable of at least 8 hours of continuous operation.    * **Calibration**: Automatic self-calibration function to ensure reliable performance. 3. **Laser Rangefinder (Bosch GLM 50 or Equivalent)**    * **Range**: Minimum 50 meters, with accuracy of ±1.5 mm for precise measurements.    * **Display**: Backlit (at least) 2-inch LCD for visibility in various lighting conditions.    * **Battery Life**: At least 8 hours of continuous use on a full charge.    * **Units**: Metric system, memory for storing measurements. 4. **Telescoping Inspection Mirror with Flashlight (CSECO PM-10 or Equivalent)**    * **Length**: Telescoping shaft, minimum 1 meter, with adjustable angle for versatility.    * **Mirror Size**: Minimum 80 mm, made from unbreakable polycarbonate.    * **Lighting**: Integrated LED flashlight (minimum 100 lumens) for enhanced visibility in dark or enclosed spaces. 5. **Heavy Duty Expandable Steel Inspection Probe Kit (CSECO P-41X or Equivalent)**    * **Probes**: Serrated edges for efficient sample collection and inspection.    * **Reach**: Extendable to at least 1.4 meters.    * **Extension**: Positive locking mechanism for secure use during inspections. 6. **Pocket Inspection Probes (Set of 6) (CSECO PN-30 or Equivalent)**    * **Material**: Stainless steel retractable probes designed for inspecting small packages or tight spaces.    * **Types**: Includes multiple tip options (hook, scoop, needle) for various inspection tasks. 7. **Personal Inspection Tool Kit with Holster (CSECO CT-PTK or Equivalent)**    * **Tools Included**: Multi-purpose hand tools, LED flashlight, and inspection probe.    * **Storage**: Includes a holster for easy and convenient carrying and storage. 8. **Waterproof Carrying Case with Wheels**    * **Design**: Impact-resistant and waterproof for secure transport and storage of equipment.    * **Weight**: Maximum weight of 25 kg to ensure portability and ease of use. 9. **Extension Pole System (CSECO K9-150G or Equivalent)**    * **Reach**: Extendable for detailed inspections in difficult-to-reach areas.    * **Compatibility**: Compatible with inspection mirrors and videoscopes for versatile use.   **Environmental Requirements:**   * **Temperature Range**: Operational in environments from -10°C to +50°C. * **Humidity**: Suitable for environments with humidity levels up to 95% (non-condensing). * **Protection**: Designed to meet IP65 or higher dust and moisture resistance standards for all components.   English or Ukrainian (preferred) language **user manual** |  |  |  |
| **8** | **Handheld Metal Detector (Ceia PD140N or equivalent)**  **Description:** A versatile handheld metal detector designed for efficient body searches to detect knives, weapons, and concealed metal objects. It ensures reliable detection of stainless-steel items with immunity to electromagnetic and mechanical interference.  **Key Features:**   * **Uniform Sensitivity:** Effectively detects both magnetic and non-magnetic metals, including stainless steel. * **Alarm System:**   + Mandatory: Optical (LED) + acoustic signals.   + Optional: Vibration alert. * **Operating Time:**   + At least 50 hours * **Battery:**   + Acceptable: Replaceable AA batteries or 9V batteries.   + Preferred: Integrated Li-Ion with charge indicator * **Durability:**   + High protection for dust and water resistance.   + Impact-resistant case (preferred).   **Warranty:**  Minimum 12-month warranty with service support  English or Ukrainian (preferred) language **interface and user manual** |  |  |  |
| 9 | **Document Reader (Foster + Freeman VSC90 Mobile or equivalent)**  Description  A professional document examination workstation for comprehensive authentication of security documents including passports, IDs, visas, banknotes, and source documents. The system integrates multispectral imaging (UV/visible/IR), precision optics, and advanced analytical software to detect counterfeits and alterations. Designed for border control checkpoints, law enforcement agencies, and forensic laboratories.  Key Features  High-Sensitivity Camera  CMOS sensor with effective resolution not less than Full HD (1920×1080 px), capable of producing sharp, detailed images under all illumination modes (visible, IR, UV).  Color and Monochrome Imaging  Supports imaging in full color and monochrome under all spectral conditions.  Suitable for detailed analysis of printed and handwritten information.  Infrared (IR) and Ultraviolet (UV) Examination  • Includes imaging capabilities under IR and UV light for detection of invisible security elements (fibers, latent images, inks, etc.)  • Supports UV wavelengths: 365 nm, 313 nm, 254 nm (or equivalent within UVA/UVB/UVC bands)  • IR range: 700–950 nm, including ≥850 nm and ≥980 nm (anti-Stokes verification)  Magnification  • Effective optical magnification ≥20×  • Total on-screen magnification ≥100×  • Allows clear inspection of microprinting, security threads, latent images, and structural features  Lighting Configuration  Built-in multispectral illumination system, providing uniform, integrated lighting across:  • Visible Light  o Coaxial, oblique, incident, and transmitted illumination  o Multiple discrete wavelength sources or tunable/adjustable light sources  o Individual intensity control of each spectral component  • Infrared (IR)  o Coverage of key wavelengths (≥850 nm and ≥980 nm)  o Multiple modes: oblique, spot, directional, and diffuse IR lighting  o Light sources must be:  o Fully controlled by the main system software  o Included in standard delivery package  • Ultraviolet (UV)  o Supports UVA, UVB, and UVC bands  o Covers 365/313/254 nm  o Must include protective shielding for operator safety  User Interface  • Operated via integrated touchscreen or external software  • Supports live view, image capture, comparison, measurement, annotation, and image adjustment  Power Supply  • Standard 220–240V AC, 50–60 Hz  Connectivity  • Supports data export and integration via USB and/or Ethernet  Portability  • Supplied with impact-resistant transport case, suitable for relocation  System Delivery Requirement  Delivered as a complete, ready-to-use document examination workstation, including:  • Main document examination device (spectral comparator)  • Integrated control computer with preinstalled software  • Integrated monitor (≥14")  • All required power and data cables, accessories, and peripherals  Note: Delivery formats may be embedded or modular. All components must be certified by the manufacturer as compatible and functional without additional purchases.  Document Reading Capabilities:  • MRZ Reader  • RFID/ePassport Reader: Integrated ICAO 9303 compliant reader (min. BAC + DG1–DG15). Must support Ukrainian biometric documents (native or via updates).  • Facial Image Comparison Module  Reference Database  • Core offline database, including:  o 100+ passport templates  o 50+ currency specimens  o Ukrainian documents (IDs/passports)  • Online systems must provide:  o Local caching of essential documents  o Full offline functionality  Optional Features (non-mandatory)  • Narrowband illumination across 400–700 nm  • Barcode scanner (1D/2D)  Training: At least basic operator training (online or pre-recorded), covering device operation, software, and maintenance. Preferred language: Ukrainian, also acceptable: English.  Warranty and Documentation  • Minimum 12-month warranty, including DOA replacement  • Free software updates for at least 3 years  • Documentation: Full User Manual and Quick Start Guide in English or Ukrainian (preferred), in printed or digital format |  |  |  |
| **10** | **Mobile Document Checking Device (Doculus Lumus or equivalent)**  Description:  A portable, professional-grade device designed for fast and reliable visual inspection of identity and security documents. Ideal for detecting various document protection features such as microprinting, UV elements, holograms, and embossed textures. Suitable for use by border control, police, banks, and other institutions working with identity verification in both field and office environments.  Key Features:  Magnification:  Optical zoom of at least 15x for close inspection of document security elements. Additional zoom levels are acceptable.  Optical Lens System:  Lens system must provide a clear and sharp magnified image with minimal distortion in the central field of view and faithful color rendering, enabling reliable visual inspection of document security features (e.g., microtext, holograms, color-shifting inks).  Incident LED illumination (Torch Mode):  • Integrated white LED light source for general document illumination, including areas outside the magnified field of view.  • UV torch mode (365 nm) - optional (non-mandatory)  Ultraviolet Light Mode:  • Required UV wavelength: 365 nm  Built-in UV light source to reveal fluorescent and invisible document features. Can be used in combination with magnification.  Oblique (Angled) Light Illumination:  At least one angled LED light source for enhanced visibility of raised structures, fibers, and holographic elements. Adjustable or rotatable design preferred.  Continuous Light Mode:  Any light source (LED or UV) must be capable of running continuously for at least 1 minute for uninterrupted inspection.  Power Supply:  Operates on standard AAA batteries and/or built-in rechargeable battery. Either or both options are acceptable.  Wrist Support:  Device includes a wrist strap or support for convenient single-hand operation and improved mobility.  Transport case or protective pouch for field use.  Battery Life: Minimum 8 hours under typical use.  Weight: Not exceeding 500 g.  English or Ukrainian (preferred) language interface and user manual  Warranty:  Minimum 12-month warranty with service support |  |  |  |
| **11** | **Portable Fingerprint Dactyloscopic Scanner**  A high-performance device designed for biometric identification and verification in critical applications such as law enforcement, border control, and civil identification programs. Built for fast, reliable, and secure performance, it integrates seamlessly with Automated Fingerprint Identification Systems (AFIS) and other security systems.  Key Features:  • Resolution: not less than 500 DPI for precise image capture.  • Sensor Type: Optical sensor with adaptive illumination or equivalent solution providing high contrast images in all lighting conditions (works effectively in both dark and bright environments).  • Liveness Detection: Utilizes advanced 3D structure and blood flow analysis, or an equivalent method (e.g., optical, capacitive, or multispectral liveness detection), to ensure fingerprint authenticity and proven resistance to common spoofing techniques (gelatin, silicone, printed)  • Scanning Speed: Scanning Speed: ≤ 2.5 seconds for rapid fingerprint verification.  • Durability: not less than IP53  • Connectivity: USB 2.0, USB 3.0, or USB-C with optional Bluetooth support for wireless integration.  • Multimodal Biometric Support: Compatible with facial recognition systems, enabling multimodal identification.  Specifications:  • Scan Area: not less than 38\*38 mm, not more than 50\*50 mm  • Operating Temperature Range: not less than from -10°C to +50°C  Applications:  • Law enforcement  • Border control  • Civil identification programs  Compliance:  • Meets international biometric standards.  Training:  At least basic training for operators, covering usage and basic maintenance.  Warranty:  Minimum 3-years warranty with service support and component replacement in case of manufacturing defects.  English or Ukrainian (preferred) language interface and user manual |  |  |  |
| **12** | **Handheld Imaging System for Detecting Drugs and Contraband (Rapiscan MINI Z® or equivalent)**  **Description** A portable handheld imaging system designed for non-intrusive inspection and detection of organic threats and contraband. It enables customs officers, law enforcement, and border security personnel to scan hard-to-reach or concealed areas—such as vehicles, furniture, walls, packages, and aircraft interiors—for narcotics, explosives, currency, and other illicit materials.  **Minimum Technical Requirements**   * Imaging technology: Backscatter or Z-backscatter X-ray, or other equivalent non-intrusive imaging method suitable for identifying hidden organic materials. * Detection capabilities: Must detect a wide range of organic threats, including narcotics, explosives, currency, and other contraband. * Image quality: Medium to high resolution sufficient for reliable identification and differentiation of concealed items. * Scan area per frame: Minimum 14 × 14 cm with the ability to manually scan larger surfaces. * Portability: Weight of device should not exceed 7 kg (including battery), suitable for one-person operation. * Power supply: Rechargeable batteries with at least 5 hours of continuous operation; includes charger and one or more spare batteries. * Display and user interface: Integrated screen or external tablet with real-time imaging, intuitive interface, and image storage/export options (USB, SD card, or wireless). * Durability: Minimum IP54-rated housing (dust and splash resistant); operational temperature range from 0°C to +45°C or wider. * Safety and compliance: Conforms to international safety standards for handheld X-ray or imaging systems; low radiation emissions; certified for field and security use.   **Preferred Features (Optional)**   * Wireless or remote operation via tablet or app * Swappable/modular battery design * Multilingual interface * Built-in training or simulation mode   **Applications**   * Customs and border inspections * Law enforcement and anti-contraband operations * Vehicle, cargo, and package screening * Field deployment and rapid-response inspection   **Deliverables**   * Handheld imaging device with display interface * Minimum two rechargeable batteries * Battery charger * Protective transport/storage case   English or Ukrainian (preferred) language interface and user manual **Training:**  Basic training for operators, covering usage and basic maintenance.  **Warranty:**  Minimum 2-years warranty with service support and component replacement in case of manufacturing defects. |  |  |  |
| **13** | **Portable X-ray Scanner (VIKEN HBI-120 or equivalent)**  Description:  The handheld backscatter X-ray scanner is designed for quick and safe detection of concealed explosives, narcotics, weapons, and other prohibited items in vehicles, baggage, and cargo. It features an integrated X-ray source and provides real-time imaging displayed on a touchscreen, with data storage for further analysis.  Key Technical Requirements:  • Scanning Technology:  Backscatter X-ray or equivalent  • X-ray Source:  Miniaturized, integrated X-ray source for compactness and ease of use  • Radiation Energy:  Not less than 120 keV for effective detection of various materials, including dense metals.  • Display:  Not less than 5-inch Full HD touchscreen, anti-glare.  • Data storage:  Not less than 10,000 image scans  • Scanning Speed:  Not more than 10 seconds per scan zone.  Preferably - not more than 5 seconds for rapid scanning mode.  • Weight:  Not more than 6 kg for extended use in field operations.  • Autonomy:  Not less than 4 hours of battery life with replaceable batteries.  • Start-up Time:  Device should be ready for operation within (not more than) 60 seconds after being powered on.  • Environmental Protection:  IP54 or better with a temperature range of (not less than) -20°C to +50°C to ensure protection from dust and water.  • Safety:  Device must comply with relevant international safety, electromagnetic interference, and radiation protection standards  Accessories:  Protective case for shock and weatherproofing.  Warranty:  • Minimum 3 years for the equipment, 1 year for the X-ray source.  Training:  Basic training for operators, covering usage and basic maintenance.  English or Ukrainian (preferred) language interface and user manual |  |  |  |
| **14** | **Handheld Through-Wall Life Detector (Xaver™ 100 or Equivalent)**  Description  The handheld through-wall life detector is a compact, portable device designed to detect the presence and movement of individuals behind solid structures such as walls, partitions, or debris. It is ideal for use in rescue operations, law enforcement, and tactical activities, including locating hidden suspects and conducting search and rescue missions in collapsed buildings.  Key Features  • Wall Material Penetration  Capable of detecting through a variety of materials: concrete, reinforced concrete, cement blocks, brick, drywall, wood, plaster, stucco, adobe and other standard construction materials.  • Field of View  o ≥ 100° in both azimuth and elevation  • Frequency Range  o 3 GHz–10 GHz (or equivalent spectrum ensuring wall penetration)  • Battery Operation Time  o Not less than 3h with CR123 or equivalent lithium cells  • Wireless Capability  o Optional or built in wireless module for remote monitoring and control  • Weight  o Not more than 8 kg  • Display Mode  o Visual indication of target presence, direction and distance  o Basic target visualization acceptable  Applications  • Search and rescue in collapsed structures or disaster zones  • Law enforcement for locating hidden or barricaded individuals  • Tactical entry and situational awareness during suspect apprehension  Compliance  Meets relevant safety and operational requirements for civilian rescue and public safety use.  Training:  At least basic operator training covering device operation and user-level maintenance (Ukrainian-language training preferred)  Warranty:  Minimum 2-years warranty with service support and component replacement in case of manufacturing defects.  English or Ukrainian (preferred) language interface and user manual |  |  |  |
| **15** | **Handheld detector for human and animal presence in vehicles**  **(Grand Detection MMD01 or equivalent)**  **Description:**  A portable device designed for non-intrusive detection of hidden persons or animals inside vehicles, containers, or enclosed spaces. Detection is based on micro-vibrations such as heartbeat, respiration, or other physiological micro-movements.  **Key Technical Requirements:**  **Detection Principle:**  Detects human or animal presence using heartbeat, breathing, or equivalent micro-movements, without requiring physical contact or intrusion.  **Sensitivity Range:**  Effective detection through standard container or vehicle walls or equivalent enclosures.  **Detection Time:**  Provides reliable detection results within (not more than) 1 min after deployment.  **Operational Environment:**  Functions in ambient temperatures from –15°C to +50°C, with humidity up to 95% (non-condensing); suitable for indoor and outdoor use.  **Portability:**  Compact and lightweight (not more than 3 kg), suitable for rapid deployment by a single operator.  **User Interface:**  Intuitive interface with visual and/or auditory/haptic alerts for detection status.  **Power Supply:**  Rechargeable battery providing not less than 4 hours of continuous operation. Includes compatible charging device.  **Mounting Options:**  Applicable to different vehicle types, containers, or enclosed spaces. Supports mounting via clamps, suction cups, magnetic base, or tripod  **Environmental Protection:**  Ingress protection rating: IP33 or higher.  **Compliance with Standards:**  Meets applicable safety and performance standards or provides equivalent documented compliance.  **Training:**  Basic training for operators, covering usage and basic maintenance.  **Warranty:**  Minimum 2-years warranty with service support and component replacement in case of manufacturing defects.  English or Ukrainian (preferred) language **interface and user manual** |  |  |  |