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

**Contract title: Supply of equipment in IT, recording media and office equipment p 1/11**

**Publication reference:** **RORS00227 – LPSRBVMMI – TD01**

**Columns 1-2 should be completed by the contracting authority**

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

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

Annex III - the contractor's technical offer

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

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

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

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

| **1.**  **Item number** | **2.**  **Specifications required** | **3.**  **Specifications offered** | **4.**  **Notes, remarks,  ref to documentation** | **5.**  **Evaluation committee’s notes** |
| --- | --- | --- | --- | --- |
| **1** | **Document scanner – 1 piece**  **Scanner Type:** Flatbed color document scanner  **Photoelectric Device:** 600 dpi color 4 line CCD sensor (RGB and black)  **Optical Resolution:** 600 dpi  **Maximum Resolution:**600 dpi  **Color Bit Depth:** Input: min. 16 bit/color/pixel Output: min. 8 bit/color/pixel  **Optical Sensor:min.** 600 dpi color CCD 4 line sensor (RGB & Black)  **Maximum Scan Area:** Flatbed 11.7" x 17" ; ADF 11.7" x 100" (=A3)  **Scanning Speed: min.** 200 dpi - B/W: Up to 70 ppm / 140 ipm with ADF ; Color: Up to 70 ppm / 140 ipm with ADF , 300 dpi - B/W: Up to 70 ppm / 140 ipm with ADF ; Color: Up to 70 ppm / 140 ipm with ADF , 600 dpi - B/W: Up to 25 ppm / 50 ipm with ADF ; Color: Up to 12ppm / 24 ipm with ADF  **Standard Connectivity:**Hi-Speed 2.0  **Power Consumption:**  Operating: max 81 W ; Standby: max 13 W ; Sleep: 1.5 W (+/- 15% of these values)  **Weight:** 25-28kg  **Preferrably supported operating systems:** Windows 10, Windows 8, Windows 7, Mac OS® X 10.5.x, 10.6.x, 10.7.x, 10.8.x, 10.11.x or later  **Dimensions:**25.2" x 18.5" x 11.3" (W x D x H)  **AUTO DOCUMENT FEEDER:**  **Capacity:** min 150 pages  **Type:** Sheetfeed 1 - pass duplex scanning; Hinge: Free stop, 15 mm max lift ; Paper Supply: Face up load, face down eject  **Document Sizes:**A4, Letter, Legal, B5, A5; Max. Size: 11.7" x 100" (ADF), 11.7" x 17" flatbed; Min. Size: 2.7" x 4.7" (ADF)  **Paper Weight:**35 g/m2 — 128 g/m2 ; less than 4" x 6": 60 g/m2 – 190 g/m2 **With included software**  Warranty: minimum 1 year |  |  |  |
| **2** | **Planetary scanner – 1 piece**  ***Minimal technical specificaitons***  **CCD Line Sensor, 4 Channels (RGB&G), No Bayer Pattern**  **Single Camera, single Sensor (No Stitching)**  **No Mechanical Shutter**  **Scan mode: true colour processing, grayscale, black and white**  **Internal Scan Modes:** 42-bit color, 14-bit grayscale, 1-bit B/W  **Minimum** 400 dpi on A2, **Scan Speed** <4 sec at 400 dpi  **Working mode: automatic**  **Max resolution:** 600 ppi  **Focus Depth:** approx.. 50 mm  **Scanning Area:** 635 x 460 mm (A2)  **Perpendicular Capture Direction** (top-down)  2 ICC Profile Handling (with/without glass)  Multiple Scan Start Methods (foot pedal, software, cradle, etc.)  **Book Cradle:** motorized, intelligent book cradle with anti-Collision and adjustable pressure, motorized glass plate, opening angle up to 90°, electrically adjustable book plates, adjustable and controlled contact pressure,  Book thickness: 150mm under the glass plate, 200mm without glass plate  **LED Illumination, No UV/IR, Focused Light Stripe (not side-lit), ligting source at least 50 cm from the original** Illumination of the scanner should be integrated into the scanner construction (head) without any additional outstanding elements. The usage of cross lighting of 2 moving beams or lighting of different sides of the book cradle with different lamps is not allowed, to avoid overexposures, shadows and reflections in the center due to their bad synchronisation. LED lamps without UV and IR radiation are required. Lighting source should be placed at least 50cm from the original. Illumination should happen in a focused moving light stripe arranged to the optical axis of the camera and follow. |  |  |  |
|  | Lighting stripe should come angled from back of the scanner towards it’s front to avoid reflections and be perpendicular to the book gutter to avoid shadows and illuminate the original down to the book spine. Lighting from the sides (left or right) is not allowed. Illumination system has to be activated automatically only during image capture **with max light load of 3lux/h**  **Usare software: obligatory.** The capturing software must support a complete, customizable workflow with multi-format export (TIFF, PDF, XML, etc.), configurable file naming, and integrated ICC profile management. It should enable real-time image processing, metadata integration (manual, CSV import, structural), visual and automated quality control, and offer optional modules for merging partial scans and background image assessment without slowing down the scanning process. Image treatment must be done “on the fly” during scanning, without requiring rescans when values change. It must support dedicated ICC profiles, offer filters (deskew, sharpen, gamma correction, stamp, etc.), metadata integration, and real-time or automated quality control.   * Data output: all the standard image formats, e.g TIFF, (uncompressed) TIFF G4, JPEG, JP2, Multipage TIFF, PDF, Multipage PDF, BMP, PNG, GIF, PCX * Standards: ISO 19264-1, Metamorfoze Light compliant * Dimensions of the scanners: approx..916 x 762 x 1281 mm (+/- 20% of the size) * Weight: approx. 90-160 kg * Power supply: 110-230 V, 50/60 Hz, 1,1-2,4 A   **Manufacturer’s warranty:** minimum 1 year |  |  |  |
| **3** | **Photocopy machine (A4 + A3) – 1 piece**  **Type:** Desktop monochrome A3 multifunction printer (print, copy, scan, optionally with fax)  **Print & Copy Speed:** Up to 28 pages per minute (ppm) A4 Up to 14 ppm A3  **Print Resolution:** min. 1,800 dpi (equivalent) × 600 dpi  **Copy Resolution:** min. 600 × 600 dpi  **Memory:** Min: 2 GB Maximum - optional: 4 GB  **Processor:** Min. dual-core 1.2GHz  **Paper Capacity:**   * Tray 1: min. 500 sheets (up to B4) * Tray 2: min. 500 sheets (up to A3)   **Paper Formats:** A5 to A3, B6, A6, 11″ × 17″ to 5-1/2″ × 8-1/2″, 8″ × 13″, 16K, 8K, envelopes, postcard, label sheet, tab paper  **Paper Weight:**   * Trays: 60–220 g/m² * Bypass: 60–220 g/m² * Duplex: 60–209 g/m²   **Duplex Printing:** Automatic, supported for A3 to A5 and various other sizes  **Warm-Up Time:** 20-30 seconds or less (at 23°C, standard voltage)  **Zoom Range:** 25% to 400% (in 0.1% increments)  **Supported Print Languages (PDL):** PCL 6, PostScript 3 Emulation, XPS  **Fonts:** PCL: 80 Roman fonts PS: 137 Roman Type1 fonts  **Preferrably supported operating systems:** Windows Vista/7/8/8.1/10, Windows Server 2008/2008 R2/2012/2012 R2, Mac OS X (10.6–10.11), Linux  **Interfaces:** min. ethernet, USB 1.1, USB 2.0. IEEE 802.11 b/g/n (Wi-Fi) |  |  |  |
|  | **Scanner Specifications**  **Type:** Full-colour scanner  **Max. Scanning Size:** A3 (11″ × 17″)  **Scanning Speed (A4, 300 dpi, simplex):** min. 45 originals per minute (opm) colour/B&W **Scanning Resolution:** Push: 200/300/400/600 dpi, Pull: 100/200/300/400/600 dpi  **Output Formats:** TIFF, JPEG, PDF, Compact PDF, XPS, Compact XPS, OOXML (pptx, xlsx, docx), Searchable PDF, PDF/A, Linearised PDF  **Scan Destinations:** E-mail, FTP, SMB, HDD (Box), PC, WebDAV, USB, Scan Server, Web Service (WSD-Scan)  Equipped with auxiliary element:  1. **desk or cabinet for the printer, which** provides a stable base, raises the printer to a comfortable working height, and often includes storage space for paper or supplies.  **2. document feeder, which** allows to automatically feed multiple pages into the scanner or copier, making it easy to scan, copy, or fax multi-page documents quickly and efficiently. It should support various paper sizes up to 11" x 39"  Warranty: minimum 1 year |  |  |  |
| **4** | **3D scanner – 1 piece**  **Core Specifications**  **Light Source:** Hybrid (White LED & 3 Infrared VCSEL projectors)  **Texture Camera:** 5 MP color camera  **Accuracy:**  Up to 0.05 mm (White LED mode)  Up to 0.1 mm (Infrared mode)  **Point Distance (Resolution):** 0.2 – 3.0 mm  **Scan Speed:**  Up to 1,200,000 points per second  20 frames per second  **Field of View (FOV):**  420 × 440 mm (White LED mode)  Up to 780 × 900 mm (Infrared mode)  **Working Distance:** Adjustable from 200 mm to 1500 mm  **Stand-Off Distance:** 470 mm  **Scan Depth:** 200 – 700 mm  **Part Size Range:** 0.3 – 4 meters  **Color Scanning:** Yes (photorealistic, with vibrant color capture)  **Positioning & Alignment Methods**   * Global markers alignment * Feature alignment * Hybrid alignment * Texture alignment |  |  |  |
|  | **Supported File Formats**: OBJ, STL, ASC, PLY, P3, 3MF  C**onnectivity & Software**  **Connection:** USB 3.0  **Software:** has to be included (proprietary, user-friendly, with advanced post-processing)  **SDK:** Available for integration/customization  **System Requirements**  **Preferrably supported operating systems:** with at least Windows 10 support, 64-bit or equivalent/similar  **Graphics Card:** similar to NVIDIA GTX1060 or higher, ≥4GB VRAM  **Processor:** min. Intel i7-8700 (or similar) or higher  **RAM:** ≥16GB  **Physical Parameters**  **Weight:** 700-800 grams  **Dimensions:** 100 × 130 × 250 mm (+/- 15%)  **Operating Temperature:** 0°C – 40°C  **Operating Humidity:** 10% – 90%  **Safety Class:** Class I, eye-safe  **Certifications & Warranty**  **Certifications:** at least CE, ROHS, WEEE  Warranty: minimum 1 year |  |  |  |
| **5.1** | **Desktop computer with OS and office suite**  **7 pieces**  Processor: minimum i7,  Storage: minimum 2 TB SSD,  Memory: minimum 16 GB RAM  With 1.) full capable operational system that can deal with everyday tasks of mainstream/common software developers and is connectable with offered printers, scanners, 3D scanners, an 2.) office suite that can give full functionality in word editig, sheet editing, preparation of presentations, etc.  Warranty: minimum 1 year |  |  |  |
| **5.2** | **Monitor – 7 pieces**  Size: 24 inches  Minimum requirements:  IPS - full HD  1920x1080/100Hz/5ms/HDMI/VGA  Warranty: minimum 1 year |  |  |  |
| **5.3** | **UPS – 7 pieces**  Has to be standby (offline) UPS designed for personal computers and home office systems  Battery Type: Sealed Lead Acid (VRLA), maintenance-free, leakproof  Battery Voltage: 12 V  Battery Capacity: 9 Ah  Typical Backup Time at Full Load (400 W): 2.0–5 minutes  Typical Backup Time at Half Load (200 W): 11–15 minutes  Typical Recharge Time: 7-8 hours  Battery Life (max): Up to 6 years or more  Connectivity: USB, DB-9 RS-232  Included Accessories: USB cable, software CD, documentation  Other characteristics: user-replaceable battery  Weight: 5-7 kg  Warranty: minimum 1 year |  |  |  |
| **6** | **HD video camera– 1 piece**  **Image Sensor** **Type:** 1/2.5-inch CMOS  **Total Pixels:** Approx. 8.4MP or higher  **Effective Pixels:** Approx. 8.29MP (3840 x 2160)  **Lens**  **Zoom Ratio:** 20x Optical Zoom  **Focal Length:** approx. 3.67 - 73.4 mm (35mm equivalent: 29.3 - 601mm)  **Aperture:** f/1.8 - f/2.8  **Minimum Focusing Distance:** 20mm (wide end), 60cm (telephoto end), 1cm (Macro)  **Image Stabilization:** Optical Image Stabilization (OIS) with Dynamic IS  **Recording**  **Recording Format:** MP4  **Recording Resolution:**  Min. 4K UHD (3840 x 2160) up to 29.97p/25p  Min. Full HD (1920 x 1080) up to 59.94p/50p  **Bit Rate:** Up to 150 Mbps (4K UHD)  **Color Sampling:** 4:2:0 8-bit  **Internal Recording Media:** Dual SD card slots (SD/SDHC/SDXC)  **Interfaces**  **Video Output:** HDMI  **Audio Input:** 3.5mm stereo mini-jack, built-in stereo microphone  **Headphone Output:** 3.5mm stereo mini-jack  **USB:** USB Type-C  **Display**  **LCD Screen:** 3.0-inch Touch Panel LCD  **Dimensions & Weight**  **Dimensions:** Approx. 109 x 84 x 182 mm (4.3 x 3.3 x 7.2 inches) (+/- 10%)  **Weight:** Approx. 740 - 800g including grip unit, battery, and lens hood (+/- 10% in g)  Warranty: minimum 1 year |  |  |  |
| **7** | **Laser projector – 1 piece**  **Display Specifications**  **Projection System:** 3 LCD system  **Display Device:** 0.64" (16.3 mm) × 3 BrightEra LCD Panel  **Aspect Ratio:** 16:10  **Native Resolution:** WXGA (1280 × 800)  **Effective Pixels:** minimum 3,072,000 (1280 × 800 × 3) pixels  **Brightness:** Minimum 4.200 lumens  **Center Brightness:** Up to 5,200 lumens  **Contrast Ratio:** approx. 3,000,000:1  **Optical System**  **Light Source:** Z-Phosphor laser diode or similar (e.g. laser phosphor)  **Light Source Life:** Up to 20,000 hours  **Projection Lens:** 1.6x manual zoom, manual focus  **Throw Ratio:** 1.29:1 - 2.07:1  **Image Size:** 40" - 300" (1.02 m - 7.62 m)  **Keystone Correction:** Horizontal ±30 degrees approx., Vertical ±30 degrees approx.  **Input/Output**  **Video Input:** Composite (RCA), HDMI (×2), VGA (D-sub 15-pin)  **Audio Input:** Mini jack  **Audio Output:** Mini jack  **Network:** RJ-45  **Control:** RS-232 (DB-9pin)  **USB:** Yes  **Audio**  **Built-in Speaker:** yes, min. 16W mono  **General Specifications**  **Dimensions:** 371 × 100 × 319.3 mm (14.61" × 3.94" × 12.57") (+/- 10% approx.) |  |  |  |
|  | **Weight:** 5-6 kg  **Noise Level:** max. 36 dB (Standard mode) / 28 dB (Quiet mode)  **Power Consumption:** max 350 Watts (100V - 240V)  **Video Compatibility**  **Video Modes:** 720p, 1080i, 1080p/60, 1080p/24, 1080p/50, 576i, 480p  **Data Modes:** Maximum 1920 × 1200  **Color System:** NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60  **Additional Features**  **Filter Cleaning/Replacement Cycle:** Up to 1,000 hours  **Other needs:**  **Crestron Connected™ compatible**  **Intelligent Setting presets for quick setup**  Warranty: minimum 5 years (or 12,000 hours) |  |  |  |
| **8** | **Laptop – 6 pieces**  Monitor: min. 15 inch, - FHD,  Storage: min 1 TB SSD,  Memory: min. 16 GB ram,  Min 8-core 3.2 Ghz processor (R7 or similar)  The laptop should be designed for high-performance, offering a balance of strong CPU performance and efficient integrated graphics for productivity, content creation and serious multitasking, large image procession and video editing.  With 1.) full capable operational system that can deal with everyday tasks of mainstream/common software developers and is connectable with offered printers, scanners, 3D scanners, an 2.) office suite that can give full functionality in word editig, sheet editing, preparation of presentations, etc.  Warranty: minimum 1 year |  |  |  |
| **9** | **Notebook laptop – 2 pieces,**  Monitor: min. 10 inch,  Storage: min. 128 GB SSD,  Memory: min. 4 GB RAM  With 1.) full capable operational system that can deal with everyday tasks of mainstream/common software developers and is connectable with offered printers, scanners, 3D scanners, an 2.) office suite that can give full functionality in word editig, sheet editing, preparation of presentations, etc.  Warranty: minimum 1 year |  |  |  |
| **10** | **External HDD – 3 pieces**  Capacity: min. 2 TB  Interface: minimum USB 3.0  Powered via USB port  Preferrably supported operating systems/Operating System Compatibility: Windows, macOS, Linux  Warranty: minimum 1 year |  |  |  |
| **11** | **External HDD – 10 pieces**  Capacity: min. 4 TB  **Interface: min USB 3.0**  **Power Supply:** with external power adapter  Preferrably supported operating systems/Operating System Compatibility: Windows, macOS, Linux  Warranty: minimum 1 year |  |  |  |
| **12** | **Portable voice recorder – 3 pieces**  Internal memmory: min. 4 GB  Recording format: minimum: Mp3  With an option for expandable memory: microSD/microSDHC  Built in microphone: yes – stereo  Warranty: minimum 1 year |  |  |  |
| **13** | **LAN switch – 1 piece**  Number of ports: minium 15 x × 10/100/1000 Mbps RJ45  Fanless design for silent operation  Durable metal casing  Mounting: Desktop/Rackmount  Power Consumption: max. 10W  Switching capacity: 32 Gbps  Warranty: minimum 1 year |  |  |  |
| **14** | **Office chair – 4 pieces** minimum parametres: High backrest  Upholstered backrest and seat  Chrome-plated upholstered fixed armrests  Tilt mechanism  Height adjustment with gas lift  With telescopic cover for the GHB gas lift  Chrome base with casters (wheels)  Load capacity: max.120 kg  Dimensions [cm]:  Total height: 118-131 cm (+/- up to 3cm possible)  Seat height: 45-58 cm (+/- up to 3cm possible)  Seat width: 48 cm (+/- up to 3cm possible)  Seat depth: 49 cm (+/- up to 3cm possible)  Warranty: minimum 1 year |  |  |  |