APPENDIX I
BUSINESS AND TECHNICAL REQUIREMENTS

A. DELIVERABLES

No	Equipment*	Number of units	Deadline for delivery	Exclusion level
1.	Laptop	15		
2.	All in one PC	15		
3.	Printer	30		
4.	Scanner ADF for Archive and main office's daily activities	1	18 November 2022	51,000 EUR
5.	Scanner ADF for main office's daily activities	7		
6.	Scanner for territorial offices' daily activities	40		
7.	Smart card reader for employees	100		
8.	Signing Pad for citizens	45		

* All listed equipment should be delivered to the Probation Service of the Ministry of Justice of the Republic of Armenia by the following address: 23 Arshakunyats, Yerevan 0023, Armenia

B. TECHNICAL SPECIFICATIONS

1. Laptop

Laptop	Description
Form factor	Laptop computer
CPU	At least 10th Generation Intel® Core™ i3 processor
RAM	At least 8Gb DDR4-2666 SDRAM
Drives	At least 250GB SSD disk
Network	100/1000 Mbit/s Ethernet port, WiFi, Bluetooth
Screen	15"-16", Anti-glare, 1920 x 1080
Multimedia	Integrated web camera, microphone and speakers

Ports	At least 1 HDMI-out, 1 headphone/microphone combo, 1 power connector; 1 RJ-45, at least 1 USB 3.2 and 1 USB 2.0 (or higher), 1 SD card reader
Battery	Should provide at least 3 hours of nonstop work
Operating system	OEM Windows 10 Pro license, preinstalled in English
Power adapter	220V input
Condition	New (not refurbished)
Laptop bag	Black or other dark color for 15.6" laptop
Warranty and Support	At least 36 months

2. All-in-One PC

All-in-One PC	Description
Form factor	All-in-one
CPU	At least 10th Generation Intel® Core™ i3 processor
RAM	At least 8Gb DDR4-2666 SDRAM
Drives	At least 250GB SSD disk
Network	100/1000 Mbit/s Ethernet port
Screen	At least 21.5", Anti-glare, WLED-backlit, 250 nits, 1920 x 1080
Web Camera	Integrated web camera with microphone
Ports	At least 1 HDMI-out 1.4; 1 headphone/microphone combo; 1 power connector; 1 RJ-45; 2 USB 2.0; 2 USB 3.2, 1 SD card reader
Operating system	OEM Windows 10 Pro license, preinstalled in English

Mouse and Keyboard	Wired USB keyboard and mouse
Condition	New (not refurbished)
Warranty and Support	At least 36 months

3. Printer

Printer	Description
Printing technology	Black and white Laser printing
Maximum printing speed	At least 28 pages per minute A4 At least 18 pages per minute A4 (duplex)
Duplex printing	Automatic duplex printing should be included
Supported paper formats	At least A4 and A5; at least 65 to 160 g/m²
First page printing time (warming up)	At most 8 seconds in sleeping mode
Minimum monthly load	2200 pages
Maximum Printing Resolution	At least 1200x1200 dpi
Ports	USB 2.0 or higher, Ethernet
Compatible Operating Systems	At least Microsoft Windows 10 and 11 32/64bit Pro OS should be supported
Voltage	220V, 50-60Hz
Cartridges included	At least 1 cartridge for 1000 pages
Cables	USB and power cables should be included
Condition	New (not refurbished)

Warranty	At least 24 months

4. Duplex ADF Scanner

Scanner	Description
Scanner type	Flatbed and sheetfed
Paper format	Should support at least A4 and A5 paper formats
Optical Resolution	At least 1200x1200 dpi
Color depth	At least 24 Bits for color and 8 Bits for monochrome scanning (output)
ADF	Speed: at least 39 pages per minute (A4, color, monochrome, 200dpi) Duplex: at least for A4 paper format (minimum density range 55 - 115 g/m²) Paper load: at least 95 pages (90 g/m²)
Supported file formats	At least the following files should be supported PDF, PDF / batch, searchable PDF, PDF/A, JPEG
Ports	USB 2.0 or higher Built-in ethernet network adapter (at least 100 Mbit/s)
Compatible Operating Systems	At least Microsoft Windows 10 Pro OS should be supported
Other features	Should allow sending scanned documents to printer, email and network folders
Daily duty cycle	At least 3900 pages
Voltage	110-240V. 50-60Hz
Cables	USB and power cables should be included
Condition	New (not refurbished)
Warranty	At least 12 months

5. ADF Scanner

Scanner	Description
Scanner type	Flatbed and sheetfed
Paper format	Should support at least A4 and A5 paper formats
Optical Resolution	At least 600x600 dpi
Color depth	At least 24 Bits for color and 8 Bits for monochrome scanning (output)
ADF	Speed: at least 24 pages per minute (A4, color, monochrome, 200dpi) Duplex: at least for A4 paper format (minimum density range 55 - 115 g/m²) Paper load: at least 45 pages (90 g/m²)
Supported file formats	At least the following files should be supported PDF, PDF / batch, searchable PDF, JPEG
Ports	USB 2.0 or higher
Compatible Operating Systems	At least Microsoft Windows 10 32/64bit Pro OS should be supported
Daily duty cycle	At least 1400 pages
Voltage	110-240V. 50-60Hz
Cables	USB and power cables should be included
Condition	New (not refurbished)
Warranty	At least 12 months

6. Flatbed Scanner

Scanner	Description

Scanner type	Flatbed
Paper format	Should support at least A4 and A5 paper formats
Optical Resolution	At least 4800x4800 dpi
Light source	LED
Color depth	At least 24 Bits for color and 8 Bits for monochrome scanning (output)
Scanning speed	At most 8 seconds per A4 at 300 dpi for color and monochrome scanning and preview
Supported file formats	At least the following files should be supported PDF, PDF / batch, searchable PDF, JPEG
Functional buttons	Buttons for quick scan directly from the device
Ports	USB 2.0 or higher
Compatible Operating Systems	At least Microsoft Windows 10 32/64bit Pro OS should be supported
Power supply	Through USB port
Cables	USB cable should be included
Condition	New (not refurbished)
Warranty	At least 12 months

7. Electronic Signature Pad

Signature pad	Description
Technology	Electromagnetic Resonance (EMR)
Display	F-STN Positive Reflective, minimum resolution 320x200 pixels

Cover plate surface	Tempered glass
Active area	100 x 60 mm (+-15%)
Additional functions	Possibility to confirm signature from the device Possibility to edit (clear) signature before confirmation Possibility to cancel signing process by signer
Connection	USB
Stylus	Tethered non-electronic (battery-free) stylus
Security lock slot	Required
Compatible Operating Systems	At least Microsoft Windows 10 32/64bit Pro OS should be supported
Condition	New (not refurbished)
Warranty	At least 12 months

8. Smart Card Reader

Smart Card Reader	Description
Card size	D3 - 83 x 51mm
Chip voltage	5V, 3V and 1.8V
Connection	USB
Other requirements	Should be compatible with Armenian National ID cards software https://www.ekeng.am/file_manager/Crypto_Suite_Manager_64.exe
Compatible Operating Systems	At least Microsoft Windows 10 32/64bit Pro OS should be supported
Condition	New (not refurbished)
Warranty	At least 12 months