# Technical Specification

**Lot 1.**

| ***Minimum Specification Required*** | ***Offered Specification*** *(To be filled by the Bidder - Writing only ‘Comply’ is not acceptable)* | **Pass/fail***(to be filled by the PEA’s evaluation committee)* |
| --- | --- | --- |
| 1 | Desktop computers 1\*  | Processor Intel Core i3 8100 / Motherboard Asus or MSI or Gigabyte (Chipset intel H310), interfaces: HDMI, LAN, min. 4x USB (of which min. 2x USB 3.0 or higher) / RAM 1 x 8 GB DDR4-2400, Crucial or G.Skill or Corsair or Patriot / SSD 240 - 260 GB, Samsung or SanDisk / HDD 1 TB, WesternDigital or Seagate / DVD±RW / sufficient PSU by Corsair or "be quiet!" / silent cooling / clean Windows 10 Pro 64bit (Ukrainian language) preinstalled |  |  |
| 2 | Desktop computers 2\*\*  | Processor Intel Core i9 9900K / Motherboard Asus or MSI (Chipset Intel Z390), interfaces: LAN, min. 5x USB (of which min. 3x USB 3.1 or higher) / RAM 2 x 16 GB DDR4-2400, Crucial or G.Skill or Corsair or Patriot / M.2 SSD 1 TB, Samsung, Crucial or SanDisk / HDD 4 TB, WesternDigital or Seagate / NVIDIA GeForce GTX 1050, 2 GB / DVD±RW / sufficient PSU by Corsair or "be quiet!" / silent cooling / clean Windows 10 Pro 64bit (Ukrainian language) preinstalled |  |  |
| 3 | Desktop computers 3\*\*\*  | Processor Intel Core i9 9900K / Motherboard Asus or MSI (Chipset Intel Z390), interfaces: LAN, min. 5x USB (of which min. 3x USB 3.1 or higher) / RAM 4 x 16 GB DDR4-2400, Crucial or G.Skill or Corsair or Patriot / M.2 SSD 2 TB, Samsung, Crucial or SanDisk / HDD 4 TB, WesternDigital or Seagate / NVIDIA Quadro P2200, 5 GB / DVD±RW / sufficient PSU by Corsair or "be quiet!" / silent cooling / clean Windows 10 Pro 64bit (Ukrainian language) preinstalled |  |  |

**Lot 2.**

| ***Minimum Specification Required*** | ***Offered Specification*** ***(To be filled by the Bidder - Writing only ‘Comply’ is not acceptable)*** | **Pass/fail****(to be filled by the PEA’s evaluation committee)** |
| --- | --- | --- |
| 1 | Screen, Office: 27" | Screen size: 27" / native resolution: 2560 x 1400 px / aspect ratio: 16:9 / refresh rate: 75 Hz / response time: max. 5 ms / interfaces: HDMI, DisplayPort / flicker free / 100 % sRGB / built in speakers, min. 2 x 2 W / viewing angle: min. 178 ° / brightness: min. 300 cd/m^2 / rotatable, tiltable, adjustable in height / typical power consumption < 45 W / weight < 8 kg |  |  |
| 2 | Screen, Graphics: 27" | Screen size: 27" / native resolution: 3840 x 2160 px / aspect ratio: 16:9 / response time: max. 5 ms / interfaces: HDMI, DisplayPort, integrated USB hub / flicker free / 100 % sRGB, color calibrated incl. calibration report / 1.07 mrd. colors / viewing angle: min. 178 ° / brightness: min. 350 cd/m^2 / rotatable, tiltable, adjustable in height / typical power consumption < 50 W / weight < 7 kg |  |  |
| 3 | Notebook | Intel i5-9300H / RAM 1 x 8 GB DDR4 / SSD 512 GB / NVIDIA GeForce GTX 1050 3 GB / 15.6 " monitor, resolution: 1920 x 1080 px / min. WiFi 802.11ac 2x2 / min. Bluetooth 4.2 / Battery: 95 - 100 Wh / fast charging power adapter, min. 120 W / backlit keyboard / clean Windows 10 Pro 64bit (Ukrainian language) preinstalled |  |  |
| 4 | Notebook (rugged)\*\*\*\*  | Rugged / Intel i5-8350U / RAM 8 GB DDR4 / SSD 512 GB / 13 - 14 " monitor, resolution: 1920 x 1080 px / min. WiFi 802.11ac 2x2 / min. Bluetooth 4.2 / Battery: 50 - 100 Wh + second battery, same type / fast charging power adapter, min. 80 W / backlit keyboard / clean Windows 10 Pro 64bit (Ukrainian language) preinstalled |  |  |
| 5 | Multifunctional Printer (MFP) | Color laser printer / print, copy, scan, fax / duplex printing / printing resolution: up to 2,400 x 600 dpi / A4 print speed: 29 – 33 ppm / max. paper size: A4 / recommended monthly volume: up to 3,000 pages / scanning from flatbet, ADF / scanning resolution (flatbet): up to 1,200 x 2,400 dpi / interfaces: LAN, USB, WiFi / color touch screen / weight: up to 28 kg |  |  |
| 6 | Set of consumption material-color toner | 5x cyan, magenta, yellow, greatest cartridge capacity available / 8 x black, greatest cartridge capacity available 1920 |  |  |
| 7 | Printer b/w | Mono laser printer / duplex printing / resolution: up to 1,200 x 1,200 dpi / A4 print speed: 50 ppm / max. paper size: A4 / recommended monthly volume: up to 10,000 pages / interfaces: LAN, USB, WIFI / color touch screen / weight: up to 14 kg |  |  |
| 8 | Set of consumption material-mono toner | 12 x black, greatest cartridge capacity available |  |  |
| 9 | External hard disk | Capacity 2 TB / USB 3.0 / color: black / weight: max. 250g / incl. cable  |  |  |
| 10 | Web-camera | Image resolution: 1280 x 720p / frame rate: 30 fps / integrated mono microphone / connection: USB, cable length: min. 1.5 m / mounting clip for fixture on monitors / weight max. 75g |  |  |
| 11 | Regular mouse | Resolution: 400 to 4000 dpi (selectable)  /  6 – 8 buttons / fast scrolling / vertical + horizontal scrolling  /  connection: USB / cable length: min. 160 cm  /  weight: up to 150 g |  |  |
| 12 | GIS & media mouse | Resolution: 200 to 4000 dpi (selectable)  /  6 – 8 buttons, customizable in software  / fast scrolling / vertical + horizontal scrolling  /  connections: USB, Bluetooth, 2.4 GHz dongle  /  battery life: 60 – 80 days  /  weight: up to 150 g |  |  |
| 13 | Keyboard | Durable, backlit keys /  full sized keyboard (with numpad and function buttons) /  connections: USB, Bluetooth, 2.4 GHz dongle / battery life: min. 4 months without backlight  /  weight: up to 1 kg |  |  |

**Lot 3.**

| ***Minimum Specification Required*** | ***Offered Specification*** *(To be filled by the Bidder - Writing only ‘Comply’ is not acceptable)* | **Pass/fail***(to be filled by the PEA’s evaluation committee)* |
| --- | --- | --- |
| 1 | Software, Office suite | Microsoft Office Home & Business 2019 for PC, 64 bit |  |  |

**Lot 4.**

| ***Minimum Specification Required*** | ***Offered Specification*** *(To be filled by the Bidder - Writing only ‘Comply’ is not acceptable)* | **Pass/fail***(to be filled by the PEA’s evaluation committee)* |
| --- | --- | --- |
| 1 | A0 Plotter | Color inkjet printer (A0) / printing resolution: up to 2,400 x 1.200 dpi / A0 print speed: max. 1:20 min (std.) or 0:50 min (fast) / max. paper size: A0 / line accuracy: max ±0,1% / interfaces: LAN, USB, WiFi / weight: up to 110 kg |  |  |
| 2 | Set of consumption material-color toner | 1800 ml BK/MBK/C/M/Y ink |  |  |

**Lot 5.**

| ***Minimum Specification Required*** | ***Offered Specification*** *(To be filled by the Bidder - Writing only ‘Comply’ is not acceptable)* | **Pass/fail***(to be filled by the PEA’s evaluation committee)* |
| --- | --- | --- |
| 1 | Video projector | Native resolution: 1920 x 1200 (Full HD, aspect ratio 16:10) / brightness: 4000 – 4500 ANSI lumens / contrast ratio: 14,000:1 to 16,000:1 / image size: up to 300” / 2D keystone adjustment / interfaces: HDMI, VGA, USB / lamp durability: min. 5,000 h / power consumption: max. 350 W / weight: max. 3.5 kg |  |  |
| 2 | Projector screen | Pull-up screen / viewing area: 160 x 120 cm – 200 x 150 cm / aspect ratio: 4:3 / weight: up to 20 kg |  |  |

**Lot 6**

| ***Minimum Specification Required*** | ***Offered Specification*** *(To be filled by the Bidder - Writing only ‘Comply’ is not acceptable)* | **Pass/fail***(to be filled by the PEA’s evaluation committee)* |
| --- | --- | --- |
| 1 | Large screen TV, 75 '' | Resolution: 3,840 x 2,160 (4K, aspect ratio 16:9) / screen size: 75 " / refresh rate: min. 120 Hz / picture quality index: min. 2000 / high dinamic range (HDR) / connections: min. 3 x HDMI, 2 x USB, 1 x Ethernet, WiFi / features: smart TV, eco mode / power consumption: max. 270 W / weight: max. 32 kg / supplied with tiltable wall mount |  |  |

**Lot 7**

| ***Minimum Specification Required*** | ***Offered Specification*** *(To be filled by the Bidder - Writing only ‘Comply’ is not acceptable)* | **Pass/fail***(to be filled by the PEA’s evaluation committee)* |
| --- | --- | --- |
| 1 | Video conferencing system | Video conferencing system with built in microphone and speaker / camera: field of view min. 120 °, min. 4 x optical zoom, motorized tilt + shift, people detection, min. UHD video resolution / microphones: noise supression, high sensitivity / connections: USB / accessories: remote control, wall mount / weight: max. 1.2 kg |  |  |
| 2 | Microphone extension for the video conferencing system | Microphone extension that is fully comptabile with the videoconferencing system / min. 4 meters cable length / mute function / noise supression, high sensitivity |  |  |