## Annex of General Specification for Mid-Range Laptop Computer

\* Bidders are required to mark ( $\sqrt{}$ ) if the requirement complies, otherwise mark ( $\times$ ).

| No. | Description                   | Requirement  | *Supplier's<br>Response |               | Remarks |
|-----|-------------------------------|--|-------------------------|---------------|---------|
|     |                               |  | Yes                     | No            |         |
|     | Brand                         | Please specify   |                         | in the second |         |
|     | Model                         | Please specify   | 12.45.2                 |               |         |
|     | <b>Country of Origin</b>      | Please specify   | entage or a             |               |         |
|     | <b>Detailed Specification</b> | Must be attached   |                         |               |         |
| 1.  | Processor                     | *  |                         |               |         |
| 1.1 | Processor Type                | <ul> <li>Intel Core i5</li> <li>Cores/Threads: 4/8 or higher</li> <li>InstructionSet: 64-bit</li> <li>Generation: 11th or higher</li> </ul>  | 8                       |               |         |
| 1.2 | External Rated Clock<br>Speed | Base Frequency:900 MHz or faster     Turbo Frequency:4.2 GHz (or faster)   | La                      |               |         |
| 1.3 | Internal Cache Memory         | Level 3 Cache – 8 MB (or larger) smart cache   |                         | Ē             |         |
| 2.  | Display                       |  |                         |               |         |
| 2.1 | Screen                        | <ul> <li>Size: 15.6" HD or better</li> <li>Resolution: 1,920 x 1,080 (or higher)</li> <li>Aspect Ratio: 16:9 Widescreen</li> <li>Features: LED Backlight, Anti-Glare</li> </ul>          |                         |               |         |
| 3.  | System Board                  |  |                         |               |         |
| 3.1 | Type and Architecture         | Intel compatible chipset based system board (note: Proposed chipset must be certified by the processor manufacturer as compatible with the processor)                                    |                         |               | 19-     |
| 3.2 | Main Memory                   | • Capacity:8 GB (or higher) • Speed: DDR4-2666 MHz (or faster) (note: Memory must be expandable up to 16 GB or higher)   |                         |               |         |
| 3.3 | Graphic Adapter and Interface | <ul> <li>Card: Integrated hardware graphic accelerator</li> <li>Graphics: Intel Iris X or better</li> <li>Memory:2 GB graphic memory (or higher)</li> <li>Video Ports: VGA or</li> </ul> |                         |               |         |
| 3.4 | Audio Interface               |  |                         |               |         |

| No.   | Description           | Requirement  | *Supplier's<br>Response |    | Remarks           |
|-------|-----------------------|--|-------------------------|----|-------------------|
|       |                       |  | Yes                     | No |                   |
|       |                       | Microphone-in  |                         |    |                   |
| 71 74 |                       | Line-out connections   |                         |    |                   |
| 3.5   | IO Ports              | <ul> <li>At least 3 ports, 2 of which confirming to USB Ver.</li> <li>3.0 specification (or higher)</li> <li>Card Reader: SD Cards (or better)</li> </ul>    |                         |    |                   |
| 4.    | Storage               |  |                         |    |                   |
| 4.1   | Hard Disk Drive       | <ul> <li>Capacity:1 TB (or higher)</li> <li>Speed: 5,400 rpm (or faster)</li> <li>Interface: SATA (or better)</li> <li>Features: Shock protection</li> </ul> | 2                       |    |                   |
| 4.2   | Optical Storage       | DVD±RW drive<br>(Super Multi Double Layer<br>Drive)  |                         |    |                   |
| 5.    | Multimedia            |  |                         |    |                   |
| 5.1   | Speakers              | <ul> <li>Integrated Stereo Speakers</li> <li>16-bit Stereo with Intel<sup>R</sup> high definition audio support (or equivalent)</li> </ul>                   |                         | :  |                   |
| 5.2   | Microphone            | Built in   |                         |    |                   |
| 5.3   | Web Camera            | Built-in HD Camera   |                         |    |                   |
| 6.    | Communication         |  |                         |    |                   |
| 6.1   | Network interface     | 10/100 Mbps full-duplex<br>Ethernet Port with RJ45<br>connector  |                         |    |                   |
| 6.2   | Wi-Fi                 | Integrated 802.11b/g/n   |                         |    |                   |
| 6.3   | PAN                   | Bluetooth 4.0 (or latest)  |                         |    |                   |
| 7.    | Standard Peripheral D |  |                         |    |                   |
| 7.1   | Keyboard              | Full-size keyboard with numeric keypad   | -                       |    | ÷                 |
| 7.2   | Pointing Device       | Touchpad with multi-gesture support  |                         |    |                   |
| 8.    | Power Supply Unit     |  |                         |    |                   |
| 8.1   | Power                 | <ul> <li>110/230 V nominal input</li> <li>50/60 Hz</li> <li>3-pin square AC plug</li> </ul>  |                         |    |                   |
| 8.2   | Battery               | Capacity – 40 WHour battery (or higher)  | i i                     |    |                   |
| 9.    | Chassis               |  |                         |    |                   |
| 9.1   | Weight                | 1.8 Kg (or lower)  |                         |    |                   |
| 9.2   | Security features     | Security lock slot   |                         |    | The second second |
| 9.3   | Accessories           | Carrying case and Wireless Mouse (Same brand original mouse with accessories)  |                         |    |                   |
| 10.   | Software Requirement  | s and Compatibility  |                         |    |                   |
| 10.1  | Operating system      | The system should be   |                         |    | 6 *               |

| Description                        | Requirement  | *Supplier's<br>Response  |  | Remarks   |  |  |
|------------------------------------|--|--|--|---|--|--|
|                                    |  | Yes  | No                                     |   |  |  |
|                                    | compatible with 64-bit<br>Windows 10 and Ubuntu 16 (or<br>latest)  |  |  |   |  |  |
| Drivers for system and peripherals | Manufacturers device drivers for all system components supporting the following operating systems:  • 64-bit Windows 10  • 64-bit Ubuntu/Linux16   | ,  |  |   |  |  |
| Standard Compliance and Warranty   |  |  |  |   |  |  |
| Standard compliance                | The system must be manufactured by an ISO 9000 certified manufacturer. (note: Copy of ISO certification and Original Manufacture Authorization Letter must be attached)  |  |  | 2   |  |  |
| Warranty                           | 3-year comprehensive warranty inclusive of Parts and Labour for ALL system components and peripheral devices supplied.  1 year for battery (note: Copy of the warranty terms and conditions of the Bidder must be submitted with the Bid document) |  |  |   |  |  |
|                                    | Drivers for system and peripherals  Standard Compliance as Standard compliance   | Compatible with 64-bit Windows 10 and Ubuntu 16 (or latest)  Drivers for system and peripherals  Manufacturers device drivers for all system components supporting the following operating systems:  64-bit Windows 10  64-bit Ubuntu/Linux16  Standard Compliance and Warranty  Standard compliance  The system must be manufactured by an ISO 9000 certified manufacturer.  (note: Copy of ISO certification and Original Manufacture Authorization Letter must be attached)  Warranty  3-year comprehensive warranty inclusive of Parts and Labour for ALL system components and peripheral devices supplied.  1 year for battery (note: Copy of the warranty terms and conditions of the Bidder must be submitted with | Description   Requirement   Resp   Yes | Description   Requirement   Response   Yes   No |  |  |

(Please use separate sheets for optional offers.)

Document Ver. 2018/01