



**Section 7**  
**Bill of Quantity (BOQ)**

Item No.	Description	Unit	Qty.	Unit Price (US\$)	Total (US\$)
	<b><u>Package1:Pre-fabricated Guard Booth Works</u></b>				
	<ul style="list-style-type: none"> <li>Supply and install pre-fabricated metallic guard room as per the detailed drawings. The contractor should submit the workshop drawings and material submittals for approval, the price shall include all the related works as follows:</li> </ul> <p><b><u>Civil works:</u></b></p> <ul style="list-style-type: none"> <li>Remove existing tiles and excavate for the concrete base to agreed level, place 15cm compacted base course.</li> <li>20 cm concrete base with steel reinforcement as per drawings.</li> <li>Polycarbonate insulated roofing ( Male - Female) from an approved source, the price should include steel structure composed of 5*5cm hollow steel section, each 120 cm vertically and 85 cm horizontally, metal sheet 3mm inside roof cover.</li> <li>Walls composed of two layers of 5mm metal sheet outside, 2mm metal sheet inside, 5*5cm hollow steel section each 120 cm vertically and 85 cm horizontally, 5cm rock wool, and internal gypsum boards</li> <li>Parquet flooring from an approved source, the price should include floor steel structure as shown on the drawing.</li> <li>Internal partitions as per drawings.</li> <li>Panting for the guard booth, doors, and where required</li> <li>External painting with rough texture.</li> <li>Anti-bullet windows 33mm as shown on the drawings.</li> <li>Multi-Lock doors from an approved source electrically controlled, including automatic closure as shown on the drawings.</li> <li>Water proofing and insulation works</li> <li><i>Extended shed similar to Polycarbonate roofing to cover the waiting area and locations specified under the drawings</i></li> </ul> <p><b><u>Electrical works</u></b></p> <ul style="list-style-type: none"> <li>The price shall include supply, install and connect the following as per drawings and technical</li> </ul>				

Item No.	Description	Unit	Qty.	Unit Price (US\$)	Total (US\$)
	specifications: <ul style="list-style-type: none"> <li>• Main distribution Board.</li> <li>• Junction boxes.</li> <li>• Connection works to the main power and low voltage boards at the Ground Floor of the Building</li> <li>• Main Electrical feeder.</li> <li>• Earthing system for the guard booth</li> <li>• Lighting system which includes electrical lighting points similar to legrand or equally approved, fixtures European type 4*18 W, cables and conduits</li> <li>• Power system which includes socket outlets similar to legrand or equally approved, cables and conduits</li> <li>• Preparation works for the fire alarm system including conduits and strings</li> <li>• Preparation works for the IT points, IP CAM, and Access Control System including conduits, strings internally at the booth and externally to reach the IT Data Cabinet at G.F</li> <li>• Public address system, which includes P.A points, cables and conduits</li> <li>• Video intercom similar to Aiphone or equally approved system as shown on the Electrical layouts</li> <li>• Access door system similar to Cardax or equally approved which includes card readers, control panel, emergency exist, magnetic lock, door auto closures, as shown on the Electrical layouts.</li> <li>• Electrical control points for doors and double turnstile as reflected under the layouts complete with all requirements</li> </ul> <p><b><u>Mechanical Works</u></b></p> <ul style="list-style-type: none"> <li>• 2 Ton A/C Split Unit-Inverter type complete with all necessary installations for item 1.1 and 0.75 Ton complete with all necessary works for item 1.2</li> </ul>				
1.1	Pre-fabricated Guard Booth	Sq.M	32.00		
1.1	Pre-fabricated Guard Booth	Sq.M	40.00		
	<b>Total of Package1:Pre-fabricated Guard Booth Works</b>				

Item No.	Description	Unit	Qty.	Unit Price (US\$)	Total (US\$)
	<b>Package2: Security Guard Booth Works</b>				
	<ul style="list-style-type: none"> <li>The contractor should submit the workshop drawings and material submittals for approval, the price shall include all the related works in line with the layouts and UNDP Security Team instructions</li> </ul>				
2.1	<p>Supply and installation of high quality Double-Turnstile (in/out) with the following general specs:            Power Consumption: 220V 50Hz / 30 W            Operation Voltage : 24 V DC +- %20            Body Features: IP42 protection, outer case body and arms are manufactured as powder coated.            Passing Block: With controlled tripod arms positioned 1200 degrees.            Direction Control: Birectional, free control Arms: Ø40x2mm electro plastic, powder coated pipes profile. It can be manufactured stainless steel pipes as optional.            Pass/Stop Indicator : One indicator light on each side ( green arrow/red cross ) (widthxlength xheight):2080x1270x2239mm            Compatible of using Access Control System            The price should include all related civil and electrical works to render this item operation and function</p>	No.	1.00		

Item No.	Description	Unit	Qty.	Unit Price (US\$)	Total (US\$)
2.2	<p>Supply and installation of X Ray Machine with the following general specs:</p> <ol style="list-style-type: none"> <li><b>Tunnel size:</b> The tunnel size of 650 mm wide by 450 mm high is optimized for rapid inspection for small articles allowing the X-Ray machine to inspect them with state-of-the-art imaging.</li> <li><b>PC –Based System:</b> X-Ray system should be a PC-based system, which runs on windows XP professional. Combines the latest software and hardware technologies to provide superior image clarity, resolution and processing power.</li> <li><b>Networking:</b> The X-Ray System should be designed to network with other inspections Systems using high speed Ethernet TCP/IP data communication. Images from any XIS model can be sent through the network to a central server where they can be viewed, stored, and printed.</li> <li><b>Standard Features:</b> <ul style="list-style-type: none"> <li>Automatic Edge-Enhancement Imaging.</li> <li>Automatic Image Archiving-up to 50,000 images.</li> <li>Automatic Z-number Measurement.</li> <li>Baggage Counter.</li> <li>Color and black and white Imaging.</li> <li>Density alert.</li> <li>Forward &amp; backward Conveyor Movement.</li> <li>Geometric Image Distortion Correction.</li> <li>High penetration function.</li> <li>Horizontal and vertical Imaging.</li> <li>Image review – for up to 100 images.</li> <li>Manual Archiving of Images in Bitmap format.</li> <li>Organic&amp; Inorganic Images.</li> <li>Picture perfect – for improved resolution /penetration.</li> <li>Print Image.</li> <li>Programmable penetration /contrast levels.</li> <li>Pseudo color and Reverse Monochrome.</li> <li>Real time Image Manipulation.</li> <li>Self-Diagnostics.</li> <li>Two 17 Inch LCD Color Monitors.</li> <li>User-Selectable Zoom-In 2X to 32X.</li> </ul> </li> <li><b>X-Ray Generator:</b> <ul style="list-style-type: none"> <li>Voltage: 160KV-operating at 148 KV.</li> <li>Tube current: 0.7mA.</li> <li>Cooling: sealed Oil Bath.</li> <li>Duty Cycle: 100%A</li> <li>Beam direction: Vertically upward.</li> </ul> </li> <li><b>X-Ray Detector:</b> 1664 Channels in an L Shaped Array.</li> <li><b>Environmental conditions:</b> <ul style="list-style-type: none"> <li>Operating temperature: -10 to 50 C/14 to 122 F deg.</li> <li>Storage Temperature: -20 to 60 C/-4 to 140 F deg</li> <li>Humidity: up to 95% non-condensing.</li> </ul> </li> </ol>	No.	1.00		

Item No.	Description	Unit	Qty.	Unit Price (US\$)	Total (US\$)
	<p><b>8. Health&amp; Safety:</b>            Complies with published international standards including the U.S.F.D.A., Centre for devices and Radiation Health performance standards for cabinet X-Ray system (Federal standard 21-CFR 1020), Typical leakage radiation is less than 0. 1mR/hr, compared with maximum leakage at 0.5mR/hr permitted by the federal standard. Film safety guaranteed for high speed films up to ISO 1600</p> <p><b>9. Technical specifications:</b></p> <ul style="list-style-type: none"> <li>• Sensitivity: 38 AWG.</li> <li>• Spatial resolution: 1 mm both Horizontal and Vertical.</li> <li>• Penetration: 30 mm Steel.</li> <li>• Contrast Sensitivity: 24 Visible Levels, 4096 Gray Level.</li> <li>• Dose per Inspection: 0.1mR Typical.</li> <li>• Power requirements: 110-120 VAC, 15 Amps Max. 220 – 240 VAC, 10 Amps Max</li> </ul> <p><b>10. Computer specifications:</b>            At a minimum: core 2 Duo 1.8 GHz, 1 GB RAM, 80GB HDD, 256MB VGA, UPS to support PC and electronics.</p> <p><b>11. Video Display:</b>            Dual 17 in. high resolution, low radiation, ergonomic, LCD color monitor. Display resolution: 1280 x1024, 24 bit/pixel color resolution.</p> <p><b>12. Optional Accessories and Features:</b></p> <ul style="list-style-type: none"> <li>• Advanced continuous Diagnostics.</li> <li>• Advance Image Archiving.</li> <li>• Entry/Exit Rollers (1.0m or 1.5m long).</li> <li>• Exit Table (1.0 m long).</li> <li>• Inclined motorized Conveyers.</li> <li>• Network supervisor station.</li> <li>• Remote Operator Workstation.</li> <li>• Screener Assist Threat Detection.</li> <li>• Screener Training Programme.</li> <li>• Search/Suspect Station.</li> <li>• Side Table for Monitor and AOC placement.</li> <li>• Threat image Projection (TIP) Software.</li> <li>• 180 KV Generator for high penetration.</li> </ul>				

Item No.	Description	Unit	Qty.	Unit Price (US\$)	Total (US\$)
2.3	<p>Supply and installation of Walk through Metal detector with the following general specs:</p> <p><b>Power</b> Fully automatic 100 to 240 VAC, 50 or 60 Hertz, 45 watts; no rewiring, switching or adjustments needed.</p> <p><b>Weatherproofing / Foreign Object Protection Standards</b> Meets IP 55, IEC Standard. "Degrees of Protection provided by Enclosures," IEC 529. *IP 65 optional.</p> <p><b>Target Pinpointing Lights</b> Thirty-three (33) distinct zones are displayed with two (2) independent columns of LEDs</p> <p><b>Programs</b> 20 independent programs designed to meet all installation specific requirements including ECAC requirements for European airports and TSA requirements for U.S. airports.</p> <p><b>Multi-Unit and Multi-Brand Compatibility</b> 2,300 selectable operating frequencies and multiple channels.</p> <p><b>Interference Suppression</b> Advanced analog and digital filtering—as well as adjustable operating frequencies—eliminate the potential effects from x-ray units, radios and other electrical interference sources.</p> <p><b>Directional Counter</b> Counter tracks the number of patrons that have passed through the detector, the direction of patrons, the number of alarms and calculates alarm percentage. Four directional count settings (forward, reverse, subtraction reverse and bi-directional).</p> <p><b>Random Alarm Feature</b> Provides ability to randomly alarm on a selected percentage of non-alarming persons; adjustable from 0 to 50 percent.</p> <p><b>Alarms</b> Audible tone and volume adjustable. Bright LED visual alarm.</p> <p><b>Pacing Lights</b> International symbols located at entrance.</p> <p><b>Tamper-Proof</b> All settings are secured with a key lock and two levels of access codes. Further security is accomplished with a cabinet lock which prevents unauthorized access to physical cables, connectors and electronics.</p> <p><b>Control Outputs</b> Solid state switches (low voltage AC or DC) for operating external alarms and control devices.</p> <p><b>Construction</b> Attractive scratch and mar-resistant laminate. Detection Heads and Support: Heavy duty aluminum.</p>	No.	1		
	<b>Total of Package 2: Security Guard Booth Works</b>				

Item No.	Description	Unit	Qty.	Unit Price (US\$)	Total (US\$)
	<b>Package3: Security Arrangements</b>				
	<ul style="list-style-type: none"> <li>The contractor should submit the workshop drawings and material submittals for approval, the price shall include all the related works in line with the layouts and UNDP Security Team instructions</li> </ul>				
3.1	Supply and installation of high quality Surface Mount Barrier for vehicle entrance	No	1		
3.2	Design, supply and installation of Concrete Barriers/Plant Pots in line with the layouts and UNDP Security Team instructions	No	10		
3.3	Removal of an existing external gate and handing it to the supervising engineer	No	2		
3.4	Design, supply and installation of high quality remotely and electrically controlled galvanized Steel sliding door at the vehicle entrance with the same existing dimensions according to the layouts, the price should include provision of high quality electric motor for the gate, durable arm and electrical installations for power feeding and control	No	1		
	<b>Total of Package 3: Security Guard Booth Works</b>				



### Summary:

Item	Description	Total (US\$)
1.	Total of Package1:Pre-fabricated Guard Booth Works	
2.	Total of Package 2: Security Guard Booth Works	
3.	Total of Package 3: Security Guard Booth Works	
	<b>Total Excluding VAT (US\$)</b>	

Grand Total (in letters):-----

Contractor's Name:-----

Signature and Stamp:-----

Date:-----