

PACIFIC AVIATION INVESTMENT PROGRAM

TONGA AVIATION INVESTMENT PROJECT

PROCUREMENT OF AIR TRAFFIC CONTROL (ATC) EQUIPMENT FOR THE NEW ATC TOWER BUILDING

FUA'AMOTU INTERNATIONAL AIRPORT, TONGA

CONTRACT REF: TAL/ICBG/A-A42.2

4<sup>th</sup> February 2019

ADDENDUM NO. 4

The PAIP TFSU now issues this ADDENDUM NO. 4 to the bidding documents released 20<sup>th</sup> November 2018 for the above named tender.

Reference to bidding document	Original Wording	Addendum
3. Technical Specifications  6.2 Cross-site Fibre Optic Communications Network	6.2.3 Suppliers <b>shall</b> provide an outline solution, with costs, to enable a cross site connection between the existing (or "old") control tower building and the new control tower site plus an onward leg to the new RFFS building. It is anticipated that for the longer distance between the old and new towers that multi-mode fibre will be at the limit of its capability and Suppliers <b>shall</b> consider this possible limitation when proposing their technical solution. Diverse routing for the cross-site links <b>shall</b> be offered as an option to provide a high resilience network.	Clause 6.2.3 is replaced with the following:  <i>6.2.3 Installation (including trenching and reinstatement of the ground works) of a 24 core armoured fibre optic cable from the outside of the existing tower to inside of the new equipment room of the new control tower is being completed under the new control tower construction contract and <u>is not included in this contract.</u></i>  <i>Suppliers shall provide a solution, to enable a:</i> a) <i>Cross site connection between the new control tower to the new RFFS building.</i> b) <i>High resilience network.</i>  <i>For example, without limiting alternative solutions, this may be diverse routing for the cross-site links or a triangular network (as per diagram below) with appropriate equipment at the nodes to allow 2 of the links to provide full functionality when 1 link is not serviceable.</i>

<p>3. TECHNICAL SPECIFICATION</p> <p>Section 7 Scope of Supply: LOT 4 - New Tower Equipment</p>	<p>Target resolution shall enable the following:</p> <ul style="list-style-type: none"> <li>• Detection (thermal): Human &gt;1,000m and Vehicle &gt;3,000m</li> <li>• Recognition: Human &gt;3,500m and Vehicle &gt;10,000m.</li> <li>• Identification: Human &gt;2,200m and Vehicle &gt;5,000m</li> </ul>	<p>Target resolution shall enable the following:</p> <ul style="list-style-type: none"> <li>• Detection (thermal): Human &gt;3,000m and Vehicle &gt;5,000m</li> <li>• Recognition: Human &gt;3,500m and Vehicle &gt;5,000m.</li> <li>• Identification: Human &gt;2,200m and Vehicle &gt;5,000m</li> </ul>
<p>Section II Bid Data Sheet</p> <p>ITB 11.1 (j)</p>	<p>c) Schedule / programme of deliverables with estimated:</p> <ul style="list-style-type: none"> <li>• Manufacture times / dates FAT dates</li> <li>• Mobilisation on site dates</li> <li>• Total likely work crew size, (indicate local staff hire options)</li> <li>• Materials delivery estimated dates</li> <li>• Total Installation period</li> <li>• Estimated SAT dates</li> <li>• Training dates</li> <li>• Flight Inspection dates</li> <li>• Commissioning dates</li> <li>• Demobilisation</li> </ul>	<p>Revise sub-clause c) as follows:</p> <p>c) <i>Schedule / programme of deliverables with estimated:</i></p> <ul style="list-style-type: none"> <li>• <i>Manufacture times / dates</i></li> <li>• <i>FAT dates</i></li> <li>• <i>Mobilisation on site dates</i></li> <li>• <i>Total likely work crew size, (indicate local staff hire options)</i></li> <li>• <i>Materials delivery estimated dates</i></li> <li>• <i>Total Installation period</i></li> <li>• <i>Estimated SAT dates</i></li> <li>• <i>Training dates</i></li> <li>• <i>Flight Inspection dates (only for Lot 3 and 4; none required for Lot 1 and 2)</i></li> <li>• <i>Commissioning dates</i></li> <li>• <i>Demobilisation</i></li> </ul>

Others remain unchanged.