

**THE PORT AUTHORITY OF NY & NJ**  
**PROCUREMENT DEPARTMENT**  
**TWO MONTGOMERY STREET, 3<sup>RD</sup> FLOOR**  
**JERSEY CITY, NJ 07302**

**Date: February 13, 2015**

**ADDENDUM #5**

To prospective Proposers to Request for Proposals (RFP) # 40551: Multi-Facility Replacement Toll Collection System

Proposals due on March 26, 2015, no later than 2:00 PM EST

CHANGES

1. Book 1, Page 19, Section 19 (Proposer Requisites), Subsection C : Replace only the first paragraph of sub-section C with the following:

The Proposer shall have an Engineer of Record (EOR) and Architect of Record (AOR), as defined in Book 2, Attachment B (D&PMP), sections 3.1 and 3.2, respectively, in addition to a Project Manager. The EOR, AOR, and the Project Manager shall each have a minimum of five years of experience in field assessment, technical design, design production, and design implementation oversight for projects of size and complexity comparable to the Work described in Books 2 and 3.

2. Book 1, Attachment G, Proposer Prerequisite Response Form, pages 77 through 80: Replace the entire Attachment G with an updated Attachment G, which is accessible via the information provided under the section below entitled "Informational Purposes Only," item 1.
3. Book 1A, Attachment A, Pages 16-17 , Section 5: Replace only the first paragraph of Section 5 with the following:

The Authority will develop final test scripts for the Required Demonstration Activities prior to award of the Field Demonstration Contract. However, to illustrate the intent and scope of the final test scripts to be developed by the Authority, test descriptions are provided in the sections that follow. For the purpose of estimating the scope and duration of the final test scripts, the Contractor should assume that each test pass for the defined test numbers below will include a maximum of ten (10) vehicles of different types. For the purposes of the Field Demonstration Test Scripts, only, the terms "closely spaced" or "closely following" shall mean no more than 24 inches between vehicle bumpers. Vehicle types anticipated to be used in the testing include:

4. Book 2, Section 64, page 68: Replace the entire section as follows:

The Contractor shall provide evidence of conformity to ISO 27001 requirements of the International Organization for Standardization with his development and assembly of software, systems, documentation and equipment that shall be furnished and installed for Contract MF-244.251.

The Contractor shall perform background checks through the Secure Worker Access Consortium (SWAC) for all Contractor and Subcontractor personnel providing Services on Contract MF-244.251 at the Contractor's offsite facilities and at all remote locations. Such personnel must pass these background checks with a "HIGH" SWAC approval level.

Contractor and Subcontractor personnel residing within a two-hundred (200) mile radius of Manhattan, New York (e.g. Boston, MA to the north and Washington, D.C. to the south) shall obtain SWAC ID cards. The Contractor shall ensure that all Contractor and Subcontractor personnel renew their SWAC ID prior to the card's expiration date.

Contractor and Subcontractor personnel residing beyond a two-hundred (200) mile radius of Manhattan, New York (e.g. Boston, MA to the north and Washington, D.C. to the south) are required to fill out the "**Bidder ID Document Requirements**" form ([http://secureworker.com/assets/downloads/Bidder ID Documentation Submittal Forms.pdf](http://secureworker.com/assets/downloads/Bidder_ID_Documentation_Submittal_Forms.pdf)) to bypass physically reporting to a SWAC Processing Center. Personnel using this alternate identity documentation verification method will not be issued SWAC ID cards, though the full fee will apply. The Contractor shall ensure that all SWAC background checks are renewed prior to their expiration date.

Further information on the SWAC process, including office locations and hours of operation, is available on the following website:  
<http://www.secureworker.com/>.

5. Book 2, Attachment J, TP-08, Section 5, Proposer Box; replace in its entirety with the following:  
"The Proposer shall include in their Proposal a brief response stating their compliance or noncompliance with all requirements stated here in Section 5."
6. Book 2, Attachment J, TP-08, Section 5.1, Page 1467: Replace entire Section 5.1 as follows:

#### **5.1. Non-Environmentally Controlled Locations**

All System components furnished and installed by the Contractor in all toll plaza booths, tunnels, mezzanines, and canopies, all basement areas of the toll plaza buildings, and all exterior locations exposed to weather shall meet all of the performance and availability requirements specified in TP-01 (Book 2, Attachment C) and all of the maintenance requirements specified in System Maintenance Requirements (Book 3, Attachment A) when operated inside their closed/locked enclosures and the exteriors of these enclosures are subjected to the following conditions for extended periods:

- **Temperature:** Minus 25 to 140 degrees Fahrenheit
- **Relative Humidity:** 5 to 95 percent
- **Salt Fog:** Salt atmosphere with 5 percent salinity

To meet these requirements, System enclosures installed in non-environmentally controlled locations shall have thermostatically controlled heating and cooling equipment as required to properly maintain internal enclosure temperatures. Internal enclosure temperatures shall be maintained within a range that does not exceed the minimum and maximum OEM operating temperature ratings of all equipment installed in that enclosure throughout the ambient temperature range defined above. As defined in Section 6.2.4, the Contractor shall provide complete design calculations demonstrating that each System enclosure to be installed in non-environmentally controlled locations shall meet the operating temperature requirements defined herein.

7. Book 2, Attachment J, TP-08, Section 5.2, Page 1467. Replace entire Section 5.2 as follows:

### **5.2. Environmentally Controlled Interior Locations**

All System components furnished and installed by the Contractor in air conditioned areas of the toll plaza buildings other than toll plaza booths, tunnels, mezzanines, and canopies shall meet all of the performance and availability requirements specified in TP-01 and all of the maintenance requirements specified in Book 3, Attachment A when operated inside their closed/locked enclosures and the exteriors of these enclosures are subjected to the following conditions for extended periods:

- **Temperature:**

- o Components installed in heated areas shall meet performance requirements for temperatures between 32 and 120 degrees Fahrenheit
- o Components installed in unheated areas shall meet performance requirements for temperatures between zero and 120 degrees Fahrenheit

- **Relative Humidity:** 5 to 95 percent

For environmentally controlled interior locations, equipment that is specified by the Authority in Attachment C, TP-01, Exhibit 6 is exempt from the operating temperature requirements defined above. System components required in accordance with TP-01, Exhibit 6, Standards and Guidelines for Port Authority Technology, shall meet all of the performance and availability requirements specified in TP-01 and all of the maintenance requirements specified in Book 3, Attachment A when operated inside their closed/locked enclosures and the exteriors of these enclosures are subjected to temperatures that range from the OEM specified minimum operating temperature to the OEM specified maximum operating temperature of all such equipment. Note that the installation of any such equipment in toll plaza booths, tunnels, mezzanines, and canopies is not exempt from defined temperature requirements as these installation locations are considered non-environmentally controlled locations, and as such, are subject to the requirements defined in Section 5.1 regardless of any environmental controls that may be present.

8. Book 3, Section 25, Page 18: Replace the entire Section 25 as follows:

The Contractor shall provide evidence of conformity to ISO 27001 requirements of the International Organization for Standardization with his development, assembly, and maintenance of software, systems, documentation, and equipment under Contract MF-244.251M.

The Contractor shall perform background checks through the Secure Worker Access Consortium (SWAC) for all Contractor and Subcontractor personnel providing Services on Contract MF-244.251M at the Contractor's offsite facilities and at all remote locations. Such personnel must pass these background checks with a "HIGH" SWAC approval level.

Contractor and Subcontractor personnel residing within a two-hundred (200) mile radius of Manhattan, New York (e.g. Boston, MA to the north and Washington, D.C. to the south) shall obtain SWAC ID cards. The Contractor shall ensure that all Contractor and Subcontractor personnel renew their SWAC ID prior to the card's expiration date.

Contractor and Subcontractor personnel residing beyond a two-hundred (200) mile radius of Manhattan, New York (e.g. Boston, MA to the north and Washington, D.C. to the south) are required to fill out the "**Bidder ID Document Requirements**" form ([http://secureworker.com/assets/downloads/Bidder ID Documentation Submittal Forms.pdf](http://secureworker.com/assets/downloads/Bidder_ID_Documentation_Submittal_Forms.pdf)) to bypass physically reporting to a SWAC Processing Center. Personnel using this alternate identity documentation verification method will not be issued SWAC ID cards, though the full fee will apply. The Contractor shall ensure that all SWAC background checks are renewed prior to their expiration date.

Further information on the SWAC process, including office locations and hours of operation, is available on the following website:  
<http://www.secureworker.com/>.

**INFORMATIONAL PURPOSES ONLY:**

1. [Book 1, Attachment G, Proposer Prerequisite Response Form](#): The Proposer Prerequisite Response Form in Addendum 3 has been updated to reflect Change 2, above. See the response to question 1 for context. Proposers can use the hyperlink in the title of this item to access the updated document.
2. Attached to this Addendum is the list of AVI equipment and services available from the AVI vendor for a Multi-Protocol Reader operating in TDM protocol only. See the response to question 10 for context.

**QUESTIONS AND ANSWERS:**

The following information is made available in response to questions submitted by prospective Proposers to the Port Authority of New York and New Jersey’s (the “Port Authority” or the “Authority”) RFP for a Multi-Facility Replacement Toll Collection System. It addresses only those questions that the Port Authority has deemed to require additional information and/or clarification. The fact that information has not been supplied with respect to any questions asked by a Proposer does not mean or imply anything (nor should it be deemed to have any meaning, construction or implication) with respect to the terms and provisions of the Request for RFP, which will be construed without reference to such questions.

The Port Authority makes no representations, warranties or guarantees that the information contained herein is accurate, complete or timely or that such information accurately represents the conditions that would be encountered during the performance of the Contract. The furnishing of such information by the Port Authority shall not create or be deemed to create any obligation or liability upon it for any reason whatsoever and each Proposer, by submitting its proposal, expressly agrees that it has not relied upon the foregoing information, and that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever. Accordingly, nothing contained herein and no representation, statement or promise, of the Port Authority, its Commissioners, officers, agents, representatives, or employees, orally or in writing, shall impair or limit the effect of the warranties of the Proposer required by this RFP and any resulting contract and the Proposer agrees that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever.

<b>Q#</b>	<b>Book</b>	<b>Section,</b>	<b>Topic or Requirement</b>	<b>Question/Request</b>	<b>Response</b>
1	Book 1	Att. G Sec. C.1, pg. 80	EOR Qualifications	Attachment G Section C.1. (page Book 1-80) calls for the EOR and AOR to be registered in NY, NJ or both and includes a matrix with columns headed Firm, Project, Client, etc. What information is requested for this first chart on Attachment G?	See Change 2 of this Addendum

Q#	Book	Section,	Topic or Requirement	Question/Request	Response
2	Book 1A	Section 5, page 17 –	Field Demonstration Test Scripts. General question.	What approximate distance from bumper to bumper does the Authority consider closely-spaced or closely following vehicles?	See Change 3 of this Addendum
3	General		Security Requirements by Phase	Please explain what Port Authority security requirements will apply during the design, construction and maintenance periods. E.g., will SWAC cards be required, etc.	<p>Port Authority security requirements are defined in (Book 2, Clauses 63 and 64, on pages Book 2 - 65 through Book 2 - 68 and Book 3, Clauses 24 and 25, located on pages Book 3 - 15 through Book 3 - 18).</p> <p>All Contractor personnel working on the project during any project phase require background checks performed by SWAC.</p> <p>See Change 4 of this Addendum</p> <p>See Change 8 of this Addendum</p>
4	Book 2	101, A, 6 Page 121	“Work Area shall mean the area immediately surrounding the Work in progress, typically where workers are afoot, and/or the space within a Roadway where Work on the Roadway is being done by the Contractor.”	During demolition (civil or fascia replacement, etc...), will there be a multiple lane buffer or closure to assure motorists protection as well as a foot workers safety?	<p>For Safety Provisions, refer to Section 81 (Safety Provisions) of Book 2.</p> <p>For Maintenance of Traffic requirements, refer to Book 2, Attachment I, TP-07, and Book, Attachment L (Basic Contract Drawings).</p> <p>For Hours of Work and Construction Staging, refer to Book 2, Section 102 (Hours of Work and Construction Staging).</p>

Q#	Book	Section,	Topic or Requirement	Question/Request	Response
5	Book 2	Attachment C – System Technical Parameters (TP-01) 3.4-009	The requirement is to be able save ALL (100% of the traffic) images on the lane side for 30 days.	Please provide traffic volumes in maximum per lane/per hour so that we can correctly estimate for the storage and network bandwidth	<p>For the purposes of estimating storage and bandwidth, the Authority is providing the following 2014 traffic data:</p> <ol style="list-style-type: none"> <li>1) Maximum hourly traffic handled by a Traditional Toll Lane: 1,286 vehicles</li> <li>2) Maximum hourly traffic handled by an ORT Lane: 1,727 vehicles</li> <li>3) Maximum daily traffic handled by a Traditional Toll Lane: 20,384 vehicles</li> <li>4) Maximum daily traffic handled by an ORT Lane: 24,971 vehicles</li> <li>5) Maximum daily traffic handled by each plaza: <ul style="list-style-type: none"> <li>- BB: 10,615</li> <li>- GB: 48,853</li> <li>- GWBL: 73,935</li> <li>- GWBP: 24,298</li> <li>- GWBU: 74,463</li> <li>- HT: 49,768</li> <li>- LT: 59,124</li> <li>- OBX: 48,034</li> </ul> </li> </ol>
6	Book 2	TP-01, sec. 6.2.8-007, pg. 381	Bandwidth Restrictions	Book 2 Attachment C – TP-01 Requirement 6.2.8-007 states “The quantity, sizes, and compression factor of images shall take into consideration the need for human review as well as potential Authority PAWANET bandwidth restrictions.” Are their known bandwidth restrictions for the PAWANET network and, if so, what are they?	To the Port Authority’s knowledge at this time, there are no known bandwidth restriction of PAWANET.

Q#	Book	Section,	Topic or Requirement	Question/Request	Response
7	Book 2	TP-01, Standards and Guidelines for PA Technology, pg. 1218 and Attachment J, Section 5.2, pg. 1467		Book 2 Attachment C – TP-01 of TP-01 the Standards and Guidelines for PA Technology establish certain vendors as be required for the System. Section 5.2 of Attachment J – TP-08 establishes temperature performance requirements for environmentally controlled spaces. What should the contractor propose if PANYNJ specified equipment providers do not have equipment that meets the temperature specifications as detailed Section 5.2 of Attachment J – TP-08? Will the Port Authority accept equipment that complies with Attachment C of TP-01 but is outside the specifications set in Section 5.2 of Attachment J? When answering please also note that bidders have been instructed to respond to the entirety of Attachment J – TP-08 in one sentence.	See Change 5 of this Addendum  See Change 6 of this Addendum  See Change 7 of this Addendum
8	Book 2	TP-01, Exhibit 6, Section 3.2.6, page 1228	<p>Remote Access System.</p> <p>“The Authority also supports corporate site-to-site VPN connections and utilizes Cisco equipment for these connections.</p> <p>Remote access is authorized on a case-by-case basis by the Chief Technology Officer.”</p>	<p>Question no. 1: Can we assume that remote access to the Contractor’s equipment will be provided through the PAWANET Access, and that this remote access will be approved by the Authority’s Chief Technology Officer?</p> <p>Question no. 2: Please confirm who is responsible for furnishing VPN clients?</p>	<p>#1: The work required under contracts MF-244.251 and MF-244.251M will likely utilize a corporate site-to-site VPN connection.</p> <p>#2: The Authority would be responsible for the VPN client equipment at the Authority site and the Contractor shall be responsible for the corresponding equipment at the Contractor’s site.</p> <p>Furthermore, the Contractor shall be responsible for implementing remote access to the Contractor’s network for its remote staff including the furnishing of VPN clients as required for its staff. The Contractor’s remote staff would then use the site-to-site VPN to access the System at the Authority.</p>

Q#	Book	Section,	Topic or Requirement	Question/Request	Response
9	Book 2	TP-01, sec. 3.3, pg. 300	Engineering Drawings	<p>Book 2 Attachment C – TP-01 Section 3.3 request the proposer to provide 75% Engineering Drawings for certain lanes as a part of the proposal response. These drawings “shall include fully dimensioned plan and elevation views of these Lanes showing all proposed system equipment (both roadway mounted and canopy mounted on the same Drawings) and the distances between them and existing infrastructure”. The site visits did not provide sufficient time or access to get critical dimensions of the existing infrastructure. For example, while the proposers were allowed to observe operations at OBX Lanes 2 and 4, we were not allowed access to the lanes and there was no means to measure or even estimate the lane widths, gantry heights or distances between them. Will the Port Authority provide construction drawings for existing infrastructure to enable the proposers to respond? Alternatively, will the Port Authority allow the proposer to provide typical drawings that include critical dimensions of the Toll System components being provided but absent the references to Port Authority-provided infrastructure?</p>	<p>For dimensioned plan views, refer to Book 2, Attachment L (Basic Contract Drawings).</p> <p>For elevation views, refer to Book 2, Attachment P (Reference Drawings) and the following drawing and contract numbers:</p> <ul style="list-style-type: none"> <li>• Contract number: AKO-284.039, Drawing Number: A4.0;</li> <li>• Contract number: MF-274.038, Drawing Number: GB-S201</li> <li>• Contract number: MF-274.038, Drawing Number GWBU-S201.</li> </ul>

Q#	Book	Section,	Topic or Requirement	Question/Request	Response
10	Book 2	TP-01, sec. 3.6, pg. 305	AVI Subsystem	Book 2 Attachment C – TP-01 3.6-004 states “The Contractor shall purchase the required AVI equipment from the AVI manufacturer. For the purposes of this Contract, the Contractor will be authorized by the Authority to obtain discounted pricing exclusive to EZG members. The Contractor shall not add overhead and profit to the AVI equipment prices.” Please provide a list of products and services and their associated pricing to the potential bidders?	<p>For the purposes of preparing a cost proposal, proposers shall assume the use of Multi-Protocol Readers operating in TDM protocol only and that all AVI equipment and services, if needed, must be procured by the successful Proposer from the EZG approved AVI vendor.</p> <p>Attached to this Addendum is a list of AVI equipment and services available from the AVI vendor for a Multi-Protocol Reader operating in TDM protocol only. The pricing will be extended to those proposers selected to participate in the Field Demonstrations at the time of execution of the Field Demonstration Contract MF-244.251D, and to the proposer (i.e. Contractor) selected to perform Contract MF-244.251.</p>
11	Book 2	TP-01, Section 3.6, page 306	<p>Referring to requirement 3.6-013.</p> <p>“The Contractor shall utilize the AVI manufacturer for the tuning/commissioning of the AVI equipment.”</p>	Will the EZG approved AVI vendor provide discounted rates for tuning and commissioning of the AVI equipment for Port Authority?	See response to Question 10.
12	Book 2	TP-01, sec. 3.6, pg. 306	AVI Subsystem	Book 2 Attachment C – TP-01 3.6-013 states “The Contractor shall utilize the AVI manufacturer for the tuning/commissioning of the AVI equipment.” For the purposes of this Contract, has the Port Authority secured discounted pricing exclusive to EZG members for these services?	See response to Question 10.

Q#	Book	Section,	Topic or Requirement	Question/Request	Response
13	Book 2	Attachment P PP 5193-5346	Drawings	<p>There is a requirement to provide 75% plans for the proposed lane systems. The reference drawings supplied cannot be precisely scaled and some details are not legible. Can the drawing files referenced in the Attachment P pages 5193-5346 be made available to the respondents in any of the following formats and made available for download or distribution: *.DWG (AutoCAD), *.DXF (Drawing Exchange), *.DGN (MicroStation)</p>	<p>The requested information is not available in any of the requested formats. However, to meet the 75% plan view drawing requirements in Book 2 (Attachment C, TP-01, Section 3.3), the Authority intends, but does not guarantee, to provide (in a future addendum) the following relevant Basic Contract Drawings in .DWG (AutoCAD) file format:</p> <ul style="list-style-type: none"> <li>• Attachment L, Basic Contract Drawings, Drawings E-201, E-302 and E-602.</li> </ul> <p>See response to question 9 of this Addendum for further information.</p>
14	Book 3	Section 25, page 18	<p>Contractor Offsite and Development Work facilities Security Requirements.</p> <p>Second paragraph: "All Contractor and subcontractor personnel providing Services on Contract MF-244.251M at the Contractor's offsite facilities and at all remote locations shall be subject to formal screening and background checks through the Secure Worker Access Consortium (SWAC)."</p>	<p>It is our understanding that the SWAC requirement does not pertain to remote employees, but only to those employees that have on-site presence. Please clarify whether the above paragraph can be modified to preclude SWAC requirements for remote employees.</p>	<p>See Change 8 of this Addendum</p> <p>See response to question 3 of this Addendum for additional information.</p>

This communication should be initialed by you and annexed to your proposal upon submission. In case any Proposer fails to conform to these instructions, its proposal will nevertheless be construed as though this communication had been so physically annexed and initialed.

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

CARMEN REIN  
GENERAL MANAGER

PROPOSER'S NAME: \_\_\_\_\_

INITIALED: \_\_\_\_\_

DATE: \_\_\_\_\_

QUESTIONS CONCERNING THIS ADDENDUM MAY BE ADDRESSED TO JAMES SUMMERVILLE: [jsummerville@panynj.gov](mailto:jsummerville@panynj.gov), 201-395-3454

AVI VENDOR EQUIPMENT AND RELATED SERVICES LIST

See following page.



**RSE - Road Side Equipment**

Item	Description	Part Number	Price	UoM
1	MPR2 Reader - Redundant	802260-TAB	\$ 8,777.00	ea.
2	MP Lane Kit (includes MRFM RF Module, Circulator, IAG-3 Antenna, )	802344-003	\$ 3,250.00	ea.
3	MPR2 RF Module - MRFM (included in lane kit)	802295-001	\$ 2,000.00	ea.

**MPR2 System Integration Training and Support**

Item	Description	Price	UoM
1	Intro to and Integration Training on the MPR2 Reader	\$ 11,592.00	Lump Sum

**Optional Support**

2	AVI Engineering Phone Support	\$ 161.00	per hour
---	-------------------------------	-----------	----------

**Assumptions and Notes:**

- Initial Training performed in Mississauga, ON at Kapsch's Facility
- No more than 5 students per class
- Executed NDA in place with Kapsch
- All Rates based on E-ZPass Contract labor rates
- All Training Material provided

**Lane Tuning, Calibration and Certification**

Item	Plaza	Price	UoM
1	OBX	\$ 17,170.29	Per Plaza
2	Bayonne	\$ 9,433.44	Per Plaza
3	Goethals	\$ 14,398.44	Per Plaza
4	Lincoln	\$ 26,065.81	Per Plaza
5	Holland	\$ 18,837.13	Per Plaza
6	GWB LL	\$ 22,207.44	Per Plaza
7	GWB UL	\$ 23,393.56	Per Plaza
8	PIP	\$ 13,119.69	Per Plaza
<b>Total</b>		<b>\$ 144,625.80</b>	

**Assumptions and Notes:**

- Each plaza is tuned on one trip
- Plazas are not scheduled sequentially (worst case scenario)
- All equipment, travel and specialized vehicles and tolls included
- All Rates based on E-ZPass Contract labor rates
- Labor Rates based on night work



**MPR2 Operations and PM Training**

Item	Description	Price	UoM
1	MPR2 Operations and Preventive Maintenance Training	\$ 5,553.00	Per Class

**Optional Support**

2	AVI Engineering Phone Support	\$ 161.00	per hour
3	AVI Technician Phone Support Business hours	\$ 117.00	per hour
4	AVI Technician Phone Support After hours	\$ 153.00	per hour

**Assumptions and Notes:**

- Training provided in the NY Metro region
- No more than 5 students per class
- Executed NDA in place with Kapsch
- All Rates based on E-ZPass Contract labor rates
- All Training Material provided

**MPR2 Reader Maintenance**

Item	Plaza	Price	UoM
1	OBX	\$ 8,536.00	Per Plaza Per Year
2	Bayonne	\$ 4,268.00	Per Plaza Per Year
3	Goethals	\$ 5,424.00	Per Plaza Per Year
4	Lincoln	\$ 6,580.00	Per Plaza Per Year
5	Holland	\$ 6,580.00	Per Plaza Per Year
6	GWB LL	\$ 6,580.00	Per Plaza Per Year
7	GWB UL	\$ 6,580.00	Per Plaza Per Year
8	PIP	\$ 5,424.00	Per Plaza Per Year
<b>Total</b>		<b>\$ 49,972.00</b>	

**Assumptions**

- Annual Maintenance per E-ZPass Contract
- Rates for Contract Year 4
- 24/7 coverage - 4 Hour response time
- Corrective and preventive maintenance included