DEPARTMENTAL INPUT
CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

Rev 1

[X] New contract [ ] OTR [ ] CO [ ] SS [ ] BW [ ] Emergency

Previous Contract/Project No. N/A

[ ] Re-Bid [ ] Other

LIVING WAGE APPLIES: _YES _X_NO

Requisition/Project No: RQAV1500030

TERM OF CONTRACT: _5_ year with _5_ one-year options-to-renew

Requisition/Project Title: Electronic Queing System

Description: To purchase an electronic queing system for two areas at main Terminal J and Terminal 2

User Department(s): Miami Dade Aviation Department (MDAD)

Issuing Department: MDAD Contact Person: Nelvy Garcia Phone: (305) 876-8482

Estimated Cost: $251,411.00 Funding Source: Proprietary Revenue REVENUE GENERATING: No

ANALYSIS

Commodity/Service No: 920-45 SIC:

Trade/Commodity/Service Opportunities

Contract/Project History of Previous Purchases For Previous Three (3) Years
Check Here _x_ if this is a New Contract/Purchase with no Previous History

	EXISTING	2ND YEAR	3RD YEAR
Contractor:	N/A		
Small Business Enterprise:	N/A		
Contract Value:	N/A		
Comments:			

Continued on another page (s): _____Yes _____No

RECOMMENDATIONS

SBE	Set-Aside	Sub-Contractor Goal	Bid Preference	Selection Factor
		%		
		%		
		%		
		%		

Basis of Recommendation:

Signed: Tiandra Wright Date to SBD: November 23, 2015

Date Returned to PM: _____

2.1 Introduction

The Miami Dade Aviation Department (MDAD) plans to implement a Wireless Electronic Call Forward Queuing System that can provide electronic call forwarding queue management in the United States Customs and Border Protection (CBP) facility at Miami International Airport (MIA). A new Wireless Electronic Call Forward Queuing System is needed to increase service efficiency by streamlining the way the CBP officers signal customers in queue for service. Initially two remote locations will be outfitted with this type of system, one for the North Terminal and the other for the South Terminal Federal Inspection Stations (FIS) is required with an option for a third, when and if the Central Terminal FIS is re-opened.

As part of the same system, MDAD plans to implement an Electronic Queue Management System that can provide real-time measurement of queue length and queue waiting time.

2.2 Background

The Wireless Electronic Call Forward Queuing System must be a compact state-of-the-art electronic queuing system that utilizes wireless technology to call waiting passengers from a queue to a CBP Booth Position (each booth supports two positions or agents) utilizing custom visual, audible and voice instructions. A monitor with booth position numbers, annunciating sounds and voice instructions all advising that the next available Agent is available. A booth position number sign with a light feature that illuminates when available, a different color when occupied and a third color when idle or not in use is also needed and must be integrated into the wireless electronic call forward queue management system.

Regarding Queue Management, wireless and battery powered electronic queue sensors, strategically positioned in the queue area, automatically track and transmit queue line data to a local receiver that collects the data and transfers it to a web-based application for analysis and interpretation or forecasting. The application integrates the data from sensors to provide real-time queue length, expected wait time, and customer flow of the queue or throughput. This information will be displayed on monitors in the queuing area and also in the Meeter/Greeter area. Additionally this information is displayed via a web-based "dashboard" type environment as well as electronically sent to manager's mobile devices with predefined queue lengths; maximum wait times and other key performance indicators (kpi) are exceeded. This data must also be recorded daily in the dashboard and archived for the creation of predetermined intervals of reporting for future staff resource planning. The application mush have a flexible architecture to permit it to operate on "the cloud" (Software as a Service), on an existing Server/Network infrastructure, or on an independent standalone network and must be accessible by a wide range of browsers such as Microsoft Internet Explorer, Mozilla Firefox, Google Chrome or Apple Safari.

2.3 Current Operating Environment

The Miami International Airport (MIA) currently uses stanchions and pertaining panels to regulate the flow of traffic via an organized queueing system within the Federal Inspection Service (FIS) areas in Concourse D and J. The queue management system is mainly guided by staff who are positioned in key decision points along with signage that augment direction. The queue management in Concourse D processes approximately 20,000 international passengers daily, while Concourse J processes approximately 7,500 passengers daily.

2.4 Desired Solution Functionality

Regarding Call Forwarding:

The system must not interfere with Wi-Fi networks, cell phones, Bluetooth or cordless phone communication. The system must operate independently of the MDAD network or the CBP Network, and should be designed to be "plug-and-play" with little additional infrastructure requirements for quick and easy installation. Communication between the main computer and accessory devices, remote controls, display monitors and light controllers must use wireless protocol.

Each Booth Position/agent will have one 3-button remote. When the button is pressed, a signal is sent to the LCD Monitor to display an arrow that directs customers to the next available Booth Position/agent. A custom audible alert tone and a custom audible voice and text message will display an alert to the waiting passenger in at least three languages (English, Spanish and Portuguese). The three buttons can correspond to up to three different queues. For

example, a queue for Visitors, US Citizens and Visa Waiver would all be queued separately but an Officer could call the next Passenger from anyone of the three queues.

The Wireless Electronic Call Forward Queuing System must have or allow the following:

A single agent to pull customers from at least three (3) different lines
Individual wireless remote control

Flashing lighted indicators with numbers to be permanently affixed to Booths and/or Podiums
An independent software system structure which allows the Queue Management System to run independently and without interfering with CBP's secure network
LCD Monitors with versatile video capabilities (not static LED displays) with audio tones as well as multiple language capabilities
The ability to control not less than eighty (80) station lights and numerous peripheral devices in the North Terminal FIS at MIA
The ability to control not less than sixty (60) station lights and numerous peripheral devices in the South Terminal at MIA
Not less than 5 video interrupt modes which will allow full and split screen capabilities
Be able to play multimedia between prompts

An automation option and process that MDAD would consider would be the use of sensors at specific exit points so that as passengers pass through the designated areas the sensors would trigger the command via wireless connection and call the next passenger forward in lieu of the Officers having to push a button to call the next Passenger. This would be done with infrared technology or other similar type technology, brackets, stanchions or mounting conditions and Wi-Fi Access.

Regarding Queue Management:
Initially two remote locations will be outfitted with this type of system, one for the North Terminal and the other for the South Terminal Federal Inspection Stations (FIS) is required with an option for a third, when and if the Central Terminal FIS is re-opened. The system must not interfere with Wi-Fi networks, cell phones, Bluetooth or cordless phone communication. The system must operate independently of the MDAD network or the CBP Network, and should be designed to be "plug-and-play" with little additional infrastructure requirements for quick and easy installation. Communication between the main computer and accessory devices, remote controls, display monitors and light controllers must use wireless protocol.
Any other battery operated wireless electronic queue data collection devices that offer the same outputs as described above could also be considered.

2.5 Required System Interoperability (If Needed)

N/A

2.6 Required Interfaces

This is to be a stand-alone system.

2.7 Implementation / Configuration Services

The proposer must deliver a turnkey system, including complete implementation, installation of hardware/software and configuration of a working system.

2.8 Maintenance and Support Services

The awarded vendor must provide a 1-year warrantee covering 100% of the system (all hardware and software and telephone support). After the 1st year warrantee is over, a contract for parts and labor will be available, on an as-needed basis for maintenance or upgrade of the system. The vendor must be able to provide telephone support during normal working hours, and on-site support within 72 hours.

2.9 Training

The awarded vendor must provide hands-on, local training for the maintenance, repair and configuration of the complete system. This training will occur after the system has been completely installed and accepted.