



**COMMISSION
AGENDA MEMORANDUM**

Item No. 6e

ACTION ITEM

Date of Meeting April 23, 2019

DATE: March 18, 2019
TO: Stephen P. Metruck, Executive Director
FROM: Stuart Mathews, Director, AV Maintenance
Erik Knowles, Senior Manager AV Maintenance
SUBJECT: Contract to supply Baggage Source Messaging (BSMs)

Total estimated project cost: \$2,045,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to execute a contract to supply Baggage Source Message data (BSM) in support of baggage systems at Seattle-Tacoma International Airport for a ten-year duration for a total estimated cost of \$2,045,000.

EXECUTIVE SUMMARY

The Port of Seattle currently uses multiple data feeds from multiple BSM providers to sort baggage to airlines based on airline, flight and destination data. This is a standard process for baggage processing at most major airports. The new contract will replace the existing contract that expires on December 31, 2019.

The purpose of this request is to implement a system to receive reliable BSM data service from the successful proposer for the baggage systems at the Airport. Without BSM data, the baggage sortation systems at the Airport will be unable to sort bags to the appropriate airline make-up devices. This lack of capability could cause substantial operational and financial impacts to most of the airline customers as well as loss of passenger confidence.

With the pending completion of both Phase 1 of the Baggage Optimization project in 2019 and the International Arrivals Facility (IAF) baggage re-check system in 2020, the timing is appropriate to implement a multi-year contract. Implementing such a contract will provide continuity of service through the three phases of construction that Baggage Optimization will require until completion in 2025.

JUSTIFICATION

A Baggage Source Message (BSM), which includes flight and passenger information, is sent by an airline's departure control system to the Sea-Tac baggage handling systems via a third-party

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vendor. This electronic message is used to auto-sort baggage for airlines that utilize more than one baggage makeup.

With the expected start-up of both the IAF baggage system and Phase 1 of Baggage Optimization, there is a need for a unified system throughout the implementations of these projects. Because there are multiple additional phases to Baggage Optimization, a multi-year agreement will provide consistency in connecting these baggage systems with the appropriate BSM data feeds.

DETAILS

All airlines and all major airports share electronic information that uniquely identifies each checked bag and its planned route through airports, all the way to its ultimate destination. This electronic information allows Sea-Tac's baggage system to efficiently manage the flow of departing and transferring bags annually. In 2018, 10.7 million bags were processed using BSMs.

The new contract will provide BSM electronic data in a standard format that is consistent with the International Air Transport Association (IATA) format and requirements. This format assures that electronic information is compatible with all airlines and airports that use it.

Implementation of a new BSM vendor is estimated to cost \$295,000 based on a previous effort similar in scope. There is a risk that the selected vendor implementation is more complex, requiring additional budget. The small capital implementation project will be funded through the AV IT Small Capital CIP, C800066.

The cost for each year of the contract is budgeted within the annual Aviation Division operating budget. The estimated value of this contract is \$1,750,000 over a ten-year period. The contract will be executed for a five-year period, with up to five one-year renewal years. ICT capital project costs are estimated to be an additional \$295,000. Total value is estimated at \$2,045,000.

Although there will be limited subcontracting opportunities for this procurement, AV and CPO will be coordinating with the Diversity in Contracting Department to maximize outreach to potential MWBE firms capable of performing these services.

Scope of Work

The scope of work for this procurement incorporates the successful proposer providing the necessary hardware, software and data delivery processes to ensure the following data flow to/from the Airport baggage systems. The Port will require the successful proposer to provide BSM connectivity to all Port baggage system sortation software, configure equipment, test the BSM data flow prior to go-live and provide all hardware and software necessary to successfully connect the systems.

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The specific items required are as follows:

- (1) BSM (Bag Source Message)
- (2) BTM (Bag Transfer Message)
- (3) BPM (Bag Processing Message)

This will enable airline baggage to sort properly across all Airport baggage systems for timely loading of baggage on departing aircraft.

Schedule

The goal of this procurement will be to bid, award, test and implement a new BSM contract by January 1, 2020.

Activity

Commission authorization	2 nd Quarter 2019
RFP out to bid	2 nd Quarter 2019
RFP awarded	3 rd Quarter 2019
Contractor begins installation and testing	3 rd Quarter 2019
In-use date	1 st Quarter 2020

Cost Breakdown

	This Request	Total Project
Project Management – ICT	\$295,000	\$295,000
BSM contract x 10 years	\$1,750,000	\$1,750,000
Total	\$2,045,000	\$2,045,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

The first two alternatives listed below are both viable but have inherent risks to the Port of Seattle. Airlines have an expected level of BSM service that has been met with a high degree of reliability but is not believed to be sustainable over an extended period of time.

Alternative 1 – Extend the current contract on a year-by-year basis.

Cost Implications: Estimated range of \$75,000 - \$160,000 per year for a maximum of 2 more years.

Pros:

- (1) The current vendor is a known entity having provided consistent service since 2015.
- (2) The current vendor is familiar with our system sortation software, as they installed the software under another competitive bid contract.

Cons:

- (1) The current contract does not include all necessary features that are needed for the new baggage systems under construction through the Baggage Optimization Project and the IAF. An amendment to the current contract would need to be negotiated to

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incorporate those necessary changes. Changes include adding BSMs for two major airlines not currently provided through the existing contract: Alaska Airlines and Southwest Airlines.

- (2) Due to the lack of a competitive process, this alternative may not be the most cost-effective option.
- (3) The Baggage Optimization project and the IAF baggage system project will require updated architecture or data feed requirements. A new testing period will also be required.

This is not the recommended alternative.

Alternative 2 – Require airlines to provide their own BSM data connection to the Airport baggage systems.

Cost Implications: Estimated \$100,000 annual cost for Port of Seattle additional FTE support. Airline costs unknown.

Pros:

- (1) There would be very minimal ongoing costs to the Port for the BSM feed/service. No common use BSM feed contract would be needed.
- (2) Airlines would be responsible for their BSM feed/service.

Cons:

- (1) A large number of independent data feeds from Airlines would be required (25+). Management of the 25+ independent feeds could become unwieldy.
- (2) Potentially significant cyber-security issues and management challenges could result due to the large number of entities involved. This could increase AV/Maintenance, InfoSec and ICT costs to manage the multiple data feeds.
- (3) Airlines may choose not to participate or may be unable to support their own BSM feed, which could result in improper bag sortation and disruption to other Airlines and airport operations.
- (4) Requiring a BSM feed from each Airline may be a technological and financial barrier for the Airline.
- (5) Port would not have access to the data stream that provides significant information for passenger and baggage operational effectiveness monitoring.

This is not the recommended alternative.

Alternative 3 – Execute an RFP process to procure a BSM feed system and services for the next 10 years.

Cost Implications: \$2,045,000 over 10 years, inclusive of Port ICT capital project costs.

Pros:

- (1) Port staff will be able to test the marketplace to determine the most cost-effective qualified provider available. Several known companies can provide a similar service for BSMs.

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- (2) Port will have access to the data stream that provides significant information for passenger and baggage operational effectiveness monitoring.
- (3) Port staff will be able to schedule the transition, if necessary, to provide an overlap of service. This will ensure no interruption in performance to our customers.
- (4) Implementation will allow all current baggage systems and projects to operate under a single contract.
- (5) This implementation will assure commonality throughout the construction and commissioning of the Baggage Optimization projects and the IAF baggage project.

Cons:

- (1) There is a risk that a new contract will exceed the existing contract pricing, increasing costs to the Port.
- (2) Implementation of a new contract with a new vendor may require a temporary extension of the existing contract to ensure no service disruption.
- (3) The Baggage Optimization project and the IAF baggage system project will require updated architecture or data feed requirements. A new testing period will also be required. All requirements are outlined in the RFP.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$295,000	\$1,750,000	\$2,045,000
AUTHORIZATION			
Previous authorizations	0	0	0
Current request for authorization	\$295,000	\$1,750,000	\$2,045,000
Total authorizations, including this request	0	0	0
Remaining amount to be authorized	\$295,000	\$1,750,000	\$2,045,000

Annual Budget Status and Source of Funds

The annual cost of \$105,000 was included in the Aviation Division’s operating budget. The cost for each year of the contract is budgeted within the annual Aviation Division operating budget. The funding source is the Airport Development Fund. The costs are fully recovered from airlines through fees for use of the baggage system.

Future Revenues and Expenses (Total cost of ownership)

The 2019 forecast expenditure for Baggage Source Messaging (BSM) is \$159,000. Future year budget values will be based on the results of the RFP process going forward. If additional funding is required in future years, the Aviation Division will be presenting a budget request for the additional costs. The funding for BSMs will remain within the Aviation Maintenance expense budget and the funding source will be the Airport Development Fund.

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ADDITIONAL BACKGROUND

Early years (2005-2010) of BSM service experienced individual BSM feed failures that resulted in both Alaska Airlines and Delta Airlines choosing to install redundant BSM feeds. This procurement will allow for provision of BSMs for all airlines and will provide the redundancy required to minimize risk of sortation failure.

ATTACHMENTS TO THIS REQUEST

None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

June 23, 2015 – Item 4b – The commission authorized execution of a contract to supply baggage source message data for a three-year duration.