

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**

**Item No.** 5e

**Date of Meeting** October 11, 2011

**DATE:** October 3, 2011

**TO:** Tay Yoshitani, Chief Executive Officer

**FROM:** Michael Burke, Director, Seaport Leasing and Asset Management

**SUBJECT:** Radio-Frequency Identification Memorandum of Understanding

**Amount of This Request:** \$1,170,000

**Source of Funds:** Grant funding and Annual operation budget

**Total Project Cost:** \$1,170,000

**ACTION REQUESTED:**

Request authorization for Chief Executive Officer to 1) execute a Memorandum of Understanding with SSA Terminals; Total Terminals, Inc.; and Eagle Marine Services to implement a Radio Frequency Identification (RFID) system in the Port of Seattle; and 2) purchase the services of eModal to administer the Radio-Frequency Identification system related to the Clean Truck Program for an amount not-to-exceed \$500,000. The total cost of the project is estimated to be \$1,170,000.00, of which \$500,000 will be reimbursed through a previously approved U.S. Department of Transportation Congestion Mitigation/Air Quality grant and the remainder will be included in the 2012-2016 operations budgets.

**SYNOPSIS:**

Our marine terminal operators have proposed to the Port that we cooperatively implement a Radio Frequency Identification (RFID) system for trucks accessing our international container terminals to support both their terminal operations and our clean truck program. Using RFID to identify compliant clean trucks for our program will allow the Port to collect accurate data on truck visits to our terminals and help the Port plan for future enhancements to our truck program. The Port's main contributions to this system will be a five-year, sole source contract with eModal, funded by grant money already approved for this use. The other Port contribution will be to maintain a "trouble site" for truckers to deal with access issues to the terminals. The Port already maintains and funds a "trouble site" and Drayage Truck Registry (DTR) subscription with Advent Inc. for the decals used in the current Clean Truck Program.

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### **ADDITIONAL BACKGROUND:**

On January 1, 2011, the Port required all trucks entering our container terminals to be a 1994 model year or newer. Terminal operators enforced this requirement as called for in lease agreements. Trucks are identified as compliant with a Port-supplied sticker. The sticker system is a low cost way to quickly identify compliant trucks, but it does not provide the Port with any data on specific truck visits to help plan future steps in the Port's truck program – including the planned requirement that all drayage trucks calling our facilities have 2007 model year engines by 2017. Also since the sticker program is free, many more trucks have registered for our program than regularly visit the Port. Though over 8,000 trucks are currently registered in our system, a fleet of approximately 2,000 trucks regularly call at our terminals. Many of those trucks also call at Port of Tacoma.

For some time, the Port team working on the truck program has been considering the advantages of going to an RFID system to replace the stickers. Such a system would enable the Port to accurately identify the composition of fleet that regularly calls at our terminals so that the next phases of the clean truck program can be developed with more precise information. California ports use RFID to track specific truck visits to their terminals as part of their program.

Earlier this year, our terminal operators, SSAT, TTI and EMS, came to the Port with a proposal to cooperatively implement an RFID program in Seattle using the same technology that the California ports use, specifically the WhereNet readers and tags and the eModal database. The terminal operators have already made the investment in this technology to integrate this system with their gate operating systems. SSAT already uses this system at Terminal 18 and a large number of trucks serving our terminals already have this type of RFID tag. The terminal operators want an RFID system they are confident will work with their gate systems and that they can use for future enhancements to their gate operations. They also expressed concern that any future enhancements to the security check at their gates would require some type of automation of the Port's truck program check and the automation would have to work with their sensitive gate operating system.

### **TERMS OF THE MOU:**

1. The Port will enter into a five-year purchased service agreement with eModal to support the truck program at a cost not to exceed \$500,000. The Port will use its grant funding from U.S. Department of Transportation to pay for this subscription. (A competition waiver has been submitted to and approved by the CPO and Port Legal.)
2. The Port will provide a "trouble site" solely for the purpose of supporting the Port's clean truck database system. The "trouble site" will provide the following services: 1) provide support to truckers needing to register for the Port's clean truck program and 2) handle issues related to the functionality of the RFID tags. The "trouble site" will not

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handle issues with the eModal database or any issues related to gate transactions, which will remain Lessees' responsibility.

3. The terminal operators will install and maintain RFID tag readers and the necessary equipment, infrastructure, and systems at their sole cost to make the tag readers functional at each of their gate entries at their respective container terminals leased from the Port.
4. Lessees will distribute one RFID tag to each truck qualified to enter the terminal in accordance with the lease amendment incorporating the Port's clean truck program requirements, if the truck does not already have a functioning tag. Lessees will require the truck owners to purchase one tag per truck. Lessees will subsequently reimburse the truck owners for the cost of the tag after the truck has passed through the tag reader and onto the terminal for the first time to pick up or drop off a container, within six months of the RFID system being required to enter the terminal. Truckers will be required to pay for replacement tags in the future. Tags are expected to last 3-5 years and the cost for a replacement tag is approximately \$100, the same as in California.

### **PROJECT JUSTIFICATION:**

This MOU provides the Port the ability to maintain and enhance the Clean Truck Program as part of the Clean Port's Initiative.

#### ***Schedule:***

The Port anticipates that the RFID program will start functioning in January 2012, but it will not be a requirement until the second quarter of 2012.

### **FINANCIAL IMPLICATIONS:**

RFID Project Costs						Total 5 Year Cost	
RFID Project Costs (in \$000's)	2012	2013	2014	2015	2016	Total Program Cost	Qualified Grant Reimbursement
eModal Subscription	100,000	100,000	100,000	100,000	100,000	500,000	432,500
Start up for Trouble Site (POS Labor)	115,000					115,000	
Trouble site equipment (readers)	25,000					25,000	21,625
Maintain Trouble Site (5 Years)	63,000	66,150	69,458	72,930	76,577	348,115	
DTR Consultant (Advent)	36,300	36,300	36,300	36,300	36,300	181,500	45,875
<b>Subtotal - Annual Port Costs</b>	<b>339,300</b>	<b>202,450</b>	<b>205,758</b>	<b>209,230</b>	<b>212,877</b>	<b>1,169,615</b>	<b>500,000</b>
<b>Grant Reimbursement</b>	(139,525)	(117,900)	(117,900)	(117,900)	(6,777)	(500,000)	
<b>Net Port Costs</b>	<b>199,776</b>	<b>84,551</b>	<b>87,858</b>	<b>91,331</b>	<b>206,100</b>	<b>669,615</b>	

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### **Budget/Authorization Summary**

Original Budget	\$0
Previous Authorizations	\$0
Current request for authorization	\$1,170,000
Total Authorizations, including this request	\$1,170,000
Remaining budget to be authorized	\$0
Total Estimated Project Cost	\$1,170,000

### **Source of Funds**

The 2012 planned expenditures for the RFID project have been included in the proposed 2012 Operating Budget. Upon approval by Commission, the RFID related project costs for years 2013-2016 will be included in each year's annual operating budget. A grant provided by the U.S. Department of Transportation for Congestion Mitigation/Air Quality in the amount of \$500,000 was awarded to the Port and accepted by Commission on August 26, 2008.

Funds required for the project in excess of the grant amount will be funded from the general fund. The cost of the "trouble site" and DTR subscription is required even if the RFID is not installed.

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### **Financial Analysis Summary:**

<b>CIP Category</b>	Compliance																																										
<b>Project Type</b>	Environmental																																										
<b>Risk adjusted Discount rate</b>	N/A																																										
<b>Key risk factors</b>	<ul style="list-style-type: none"><li>• Not all RFID project related costs will qualify for reimbursement under the grant. Total Grant award is \$578,035, of which the Grant reimbursement is limited to \$500,000, and requires 13.5% in matching funds from the Port. The Port's share of required matching funds is reflected in the Net Operating Income impacts shown below.</li><li>• A key risk factor is the continued availability of grant reimbursement over the planned five year project timeline. This risk has been mitigated by contacting the grantor and confirming, in writing, the continued eligibility of funds from the existing grant and by confirming the grant qualified eligibility of planned spending.</li></ul>																																										
<b>Project cost for analysis</b>	N/A																																										
<b>Business Unit (BU)</b>	Container Operations																																										
<b>Effect on business performance</b>	<p>The impact of the RFID project and related grant reimbursements to Net Operating Income After Depreciation is shown below.</p> <table border="1"><thead><tr><th><b>NOI (in \$000's)</b></th><th><b>2012</b></th><th><b>2013</b></th><th><b>2014</b></th><th><b>2015</b></th><th><b>2016</b></th><th><b>TOTAL</b></th></tr></thead><tbody><tr><td>Grant Revenue</td><td>140</td><td>118</td><td>118</td><td>118</td><td>7</td><td>500</td></tr><tr><td>Operating Expense</td><td>(339)</td><td>(202)</td><td>(206)</td><td>(209)</td><td>(213)</td><td>(1,170)</td></tr><tr><td>NOI</td><td>(200)</td><td>(85)</td><td>(88)</td><td>(91)</td><td>(206)</td><td>(670)</td></tr><tr><td>Depreciation</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>NOI After Depreciation</td><td>(200)</td><td>(85)</td><td>(88)</td><td>(91)</td><td>(206)</td><td>(670)</td></tr></tbody></table>	<b>NOI (in \$000's)</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>TOTAL</b>	Grant Revenue	140	118	118	118	7	500	Operating Expense	(339)	(202)	(206)	(209)	(213)	(1,170)	NOI	(200)	(85)	(88)	(91)	(206)	(670)	Depreciation	0	0	0	0	0	0	NOI After Depreciation	(200)	(85)	(88)	(91)	(206)	(670)
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<b>IRR/NPV</b>	N/A																																										

### **ECONOMIC IMPACTS AND BUSINESS PLAN OBJECTIVES:**

Proceeding with this project will give the Port the ability to maintain the Clean Truck Program for the next five years and to gather information needed for the implementation of the next phase of the program.

### **STRATEGIC OBJECTIVES:**

This MOU supports the Port's strategic objective to Exhibit Environmental Stewardship through our Actions. The Port strives to integrate environmental and business objectives into our

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business and this MOU exemplifies how we are working with our tenants to emphasize the Port's commitment to environmental stewardship and to seeking opportunities to improve air quality and protect, preserve, and enhance natural resources under our ownership. For example, less idling in truck queues and more efficient truck movement within the terminals reduces the emissions, which leads to cleaner air; and

### ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

- Continue with the sticker program. This is the lowest cost alternative but does not provide critical specific truck visit data to enable the Port to plan for future changes to the truck program. This alternative does not support potential enhancements to the security check at terminal gates.
- Install a different RFID system at our terminal gates. This alternative could be a lower cost system overall but would not be consistent with how trucks are handled in California and may require significant investment by either the Port or the terminal operators to integrate this with the terminal gate operating systems. The terminal operators have indicated they would not accept this alternative if we have to modify their gate operating systems to make this functional.
- Implement the same RFID system as has been done successfully in California. This proven system supports both the future enhancements to our truck program and any potential enhancements to terminal gate operations. **The Port's RFID grant was awarded for this purpose and is the recommended alternative.**

### OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:

Memorandum of Understanding between Port of Seattle and SSA Terminals; Total Terminals, Inc.; and Eagle Marine Services.

### PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

- August 26, 2008 – The Commission authorized the Port to accept a U.S. Department of Transportation Congestion Mitigation and Air Quality grant for \$578,035 and to provide matching Port funds of 13.5% or \$78,035. And if appropriate, authorized the Port to execute a Memorandum of Understanding with terminal and rail operators for the grant project when needed.